Manual of Hand Work

For Use in

Daily Vacation Bible Schools

Published by the

Daily Vacation Bible School Association

90 Bible House, New York

A DAILY VACATION BIBLE SCHOOL.

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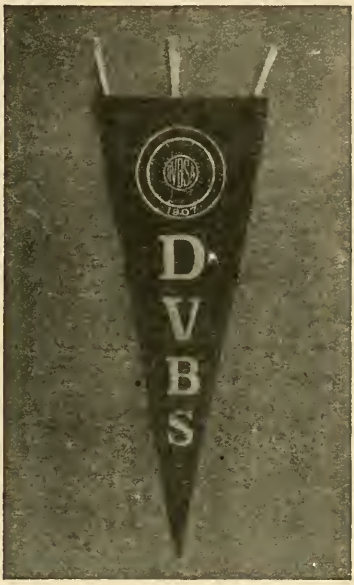

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Daily Vacation Bible School Association

90 Bible House, New York

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PUBLISHERS' FOREWORD

Not the making of things but the making of better boys and girls—this is the purpose of the manual period in the Daily Vacation Bible School. The hour given to hand-work, following immediately after the Bible lesson, is the teacher's opportunity to get close to the children and to bring home to them, in the spirit of the Bible Hour, valuable lessons in thought for others, self-control, patient industry, and honest effort to do their best. And if during this hour the children learn to use material which they can afford to the best advantage in their homes, making them more livable and attractive, by so much have the home resources been increased and the lives of the children been broadened.

No work yields the joy of satisfaction in the finished product and no work is complete unless the worker's personality and invention becomes a telling part of it. First learn then teach the fundamentals. Next lead the children to introduce originality in adapting their work to their own special needs and tastes. *Let the slogan of every day's lesson be: "A Workman that needeth not to be ashamed."*

If this book inspires a greater regard for honest work, for quality and not mere quantity, among Daily Vacation Bible School teachers and children, the purpose of the publishers will have been fulfilled.

ACKNOWLEDGMENTS

The publishers acknowledge their deep indebtedness to Mrs. Robert G. Boville who has been the inspiration and guiding spirit in the preparation of this book from the initial idea to the completion of the work, and whose generosity has made the book possible.

Thanks are also due to Miss M. L. Land for the free contribution of the chapter "From Rags to Rugs" with the illustrations; to Miss Charlotte W. Nodine for the chapter on "Wood Sloyd"; to Miss Carrie D. McComber who did the editorial work of the book and furnished the chapter on "Basketry"; to Miss Emma Charlotte Hess who contributed valuable help in other sections, and to Teachers College and Pratt Institute, both of New York City, which have been ready at all times to give advice.

Daily Vacation Bible School Association.

90 Bible House,
New York City.

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DAILY VACATION BIBLE SCHOOL OPENS HERE

JULY 6TH AT 9.30 A. M.

Good Games
Good Singing
Good Bible Stories

BOYS!

Would You Like to Make Hammocks and Baskets?

GIRLS!

Would You Like to Sew and Weave?

THEN COME

OTHER BOOKS PUBLISHED BY THE DAILY VACATION BIBLE SCHOOL ASSOCIATION:

"Manual with Hymns and Songs"
For use in Daily Vacation Bible Schools

"Manual of Music Interpretation"
For use in Daily Vacation Bible Schools

"The Kindergarten,"
Adapted to Daily Vacation Bible Schools

The Daily Vacation Bible School

CHAPTER I

Its Field: Social

For more than two months in the year, school supervision is withdrawn from 18,000,000 children in this country. Of this number over a million and a half boys and girls spend the sixty-two summer vacation days on the streets exposed to physical and moral dangers and untouched by any organized philanthropy. Church buildings accessible to these children should be equipped as daily welfare centres.

Religious

Out of the population of children between three and eighteen years of age, at least 10,000,000 are not enrolled in any Sunday School. The summer vacation is the opportunity of the year for the Church to supply this need in Daily Vacation Bible Schools.

Its Functions: Threefold

The functions of the Daily Vacation Bible School are threefold:

(a) To promote the social welfare of children irrespective of race or creed by giving them competent leaders and teachers, suitable and happy occupations, systematic oversight in games and good songs, and above all by combining with this program religious training and practical Bible teaching which is the supreme need of childhood.

(b) To promote the community use of church buildings in cities and rural districts for child welfare on broad, non-sectarian lines, especially when Public Schools are closed in summer.

(c) To employ in this field of service alert college men and women who are inspired with the spirit of social service and who are fitted to be leaders of children in worship, work, and play.

Its History

The Daily Vacation Bible School movement was founded in New York in 1901 by the present National Director of the Association, whose attention was drawn to the need of bringing together **idle children, idle churches, and idle students** for community welfare on the East Side. As an experiment, five church buildings of the Baptist communion were opened for Daily Vacation Bible Schools, in which manual

work, organized play, and Bible study went hand in hand. These schools were so successful from the start that they were repeated and multiplied in following years, and in 1905-6 were introduced into churches of seven communions, in which they are still conducted.

National Organization

In 1907 the call from other cities for the introduction of these schools made it apparent that the time had come for the creation of a National organization that should have for its sole mission the deepening and extension of the movement. In 1911 the Daily Vacation Bible School Association was incorporated under the laws of the State of New York. The Rev. Robert G. Boville has served as National Director since 1907. In that year the number of schools was 19; of centres, 4; teachers, 70 and children, 5,083. In 1915 the movement had extended to 78 centres, 339 schools, 2,731 teachers, and 73,058 children. The average cost in 1911 for each child enrolled during the entire six weeks was 98 cents; in 1915, 79 cents.

Results Worth While

1. **To take the children off the streets for six weeks** in summer is worth while. Their lives are safer, their habits are better, and their parents are freer from anxiety.

2. **To keep their hands busy,** to eliminate quarrels in their games, to instill patriotism, is worth while—it improves their morals and develops their spiritual nature.

3. **To teach as many Bible lessons in six weeks** as a Sunday School could in seven months is worth while. For many children a Daily Vacation Bible School is the only opportunity for such knowledge.

4. **To help in making good future citizens** is worth while. Forty nationalities and races are represented on the enrollment.

5. **To continue the work during the winter months,** in some special service or session, is worth while. Vacation Bible Schools usually merge in some new form of child welfare activity in churches where they are held. In repeated instances a Daily Vacation Bible School has led to a new congregation being formed or has saved an existing one from extinction.

6. **To bring students into contact with social conditions,** to teach them service by serving, is worth while. It makes their religion more real.

7. **To put a church in happy relations with a foreign community,** to prove that it is interested in social well-being, is worth while. It does more to win the confidence of the working people than do mere pamphlets concerning social service.

8. **To provide church societies** with an effective method of approach to foreign populations is worth while.—The Association has organized or helped to organize Daily Vacation Bible Schools as a regular function of National Missionary Boards of Presbyterian, Lutheran, and Baptist Communions and of Trinity Parish, New York.

Sources of Support

Financial support of the movement has come from the following sources:

1. From Association memberships—**a**, Active; **b**, Associate; **c**, Life.
2. From general contributions.

3. From churches for support of schools.
4. From colleges supporting schools or scholarships.
5. From founders of memorial schools.
6. From individual founders of schools or scholarships.

Colleges Co-Operating

The following colleges (through faculty action or student organizations) have co-operated, some to the extent of supporting and equipping one or more schools, others by supporting individual students in the work:

Amherst	Harvard	Yale	Bryn Mawr
Boston U.	N. C. State Normal	Auburn Seminary	Radcliffe
Brown	Occidental	Crozer Seminary	Swarthmore
Chicago U.	Princeton	Hartford Seminary	Vassar
Columbia	Southern Calif. U.	Rochester Seminary	Wellesley
Cornell	Western Reserve	Barnard	Mt. Holyoke

MEMBERSHIP IN THE ASSOCIATION

How to Help

1. Become an Active Member of the Association
   a, by personal service in or for a school;
   b, by the payment of ten dollars or more annually.
2. Become an Associate Member by the annual payment of any sum less than ten dollars.
3. Become a Life Member by the payment at any one time of five hundred dollars, which will be applied on the Endowment Plan.
4. Become a Scholarship Founder by the payment of one hundred dollars.
5. Become a School Founder by the payment of three hundred and twenty-five dollars.
6. Insert a clause in your will providing for the continuance of your annual contribution to "Daily Vacation Bible School Association."

ENDOWED SCHOLARSHIPS

Permanent Funds

The Daily Vacation Bible School Association is prepared to accept gifts and bequests for an Endowment Fund, the income from which will be a perpetual source of support for the work of the Association. Life memberships will be applied to this Fund. Special gifts may also be made to the **Endowment Fund for scholarships.** The income from this source will be used for equipping and paying teachers in the schools of the Association. Two thousand five hundred dollars will constitute a sum sufficient to furnish the income necessary to maintain such a scholarship.

Gifts or Bequests

For the information of friends desiring to make gifts or bequests for the work of the Association, it is to be noted that the correct corporate name is **Daily Vacation Bible School Association.**

All checks should be made payable to J. Adams Brown, Treasurer, and sent to 90 Bible House, New York City.

HOW TO START A SCHOOL

Place for a School

Any church within easy walking distance of a congested district is the place for a Daily Vacation Bible School. If the Church has a room large enough for the entire school to assemble for opening and closing exercises and smaller rooms into which the kindergarten, the boys' industrial classes, and the girls' industrial classes may retire separately, with sanitary toilets for girls and boys, the church is well suited to the work. If the rooms are airy and pleasant it is excellently adapted to the purpose. In seasonal work such as this, however, schools must adapt themselves to places afforded them. Many a successful Daily Vacation Bible School has been conducted with meagre conveniences. Some, indeed, have been held in a single room which it has been necessary to divide among the various classes during the industrial period.

Elements of Success

The success and spirit of a Daily Vacation Bible School depend largely upon two factors: The personnel of the teaching staff and the attitude of the church itself towards the school. Too many churches after opening their doors to schools turn over to the teaching staff and the sexton all further responsibility. Every church housing or supporting a school should be represented by a committee of at least three men and three women, preferably those who will be in the city during the school term, who will make the necessary arrangements for the school before it opens, visit the school at frequent intervals after it opens, and who will confer with the principal upon problems and exigencies. The Daily Vacation Bible School is more than a Public School in its effort to develop the spiritual as well as the physical and intellectual side of the child. And it is of the greatest importance that the atmosphere of the school be cheery, sympathetic, and uplifting. It should be part of the Church committee's duties, before the school opens the first of July, to interest the members and societies of the church in the projected school and to give it publicity in neighboring churches, schools, and streets.

Much expense and a good deal of work for the industrial teachers will be saved if the various women's societies cut and baste children's undergarments, and aprons, and crash or gingham work bags for the sewing classes and they may also either buy or make three or four dolls and cut and baste clothes for them which will also furnish work for the sewing classes. The purpose of the dolls is explained in the Introduction to Manual Work. Hearty co-operation between the church and the teaching staff and the children of the school will insure a helpful, happy holiday of far-reaching influence.

A fully equipped school has four teachers regularly employed and paid—one man who serves as Principal and three women who have charge respectively of the Music, Industrial, and Kindergarten Departments. This staff should be supplemented where possible by volunteers. The total cost of such a school including salaries and materials for the industrial classes should not be estimated at less than $250. If all the teachers volunteer their services without remuneration, the cost of the school will be reduced to $75 or less according to the size of the school, to cover the cost of material, the sexton's services, and incidentals. If materials are contributed, the cost will be still further reduced.

Equipment Staff

The following equipment (prices indicated) is essential to a school of 100 boys and girls:

SCHOOL NECESSITIES

(1)	1 large American Flag	60 cents
(2)	1 School Banner	20 cents
(3)	1 Door Notice (printed on cloth)	20 cents
(4)	300 Registration Cards and Punch	$1.00
(5)	1000 Invitation Cards	1.25
(6)	4 Music Books	2.00
(7)	2 Manuals of Handwork	1.00
(8)	1 Manual of Music Interpretation	.25
(9)	1 Kindergarten Guide	.10
(10)	50 Scripture Portions	no cost
(11)	Reference Books (use of) on Manual and Teaching Methods	"
(12)	30 Postal Report Cards	15 cents

INDUSTRIAL MATERIALS

HAMMOCK CLASS

Older Boys

(1) 40 lbs. Hammock Cord.
(2) 2 doz. Hammock Needles and Blocks.
(3) 4 doz. Hammock Rings and Tags.
(4) 3 Scroll Saws and Patterns.

SEWING CLASS

Older Girls

(1) 60 yds. Madras, Gingham, or other material suitable for Dresses and Aprons
(2) Doll's Bedstead and furnishings.
(3) 2 doz. Scissors.
(4) 3 doz. Thimbles.
(5) 3 packages Sewing Needles.
(6) 2 Boxes Silkateen.
(7) 3 Spools Sewing Cotton.
(8) Tape and Pins.
(9) Crochet and Knitting Cotton.

INTERMEDIATE CLASS

Raffia, Cord, Bead, and Nature Work

Younger Boys and Girls

(1) 6 lbs. Natural Raffia.
(2) 2 lbs. Colored Raffia.
(3) 6 lbs. Reed, Nos. 1, 2, 3, and 4.
(4) 5 Balls Heavy Cord for Indian Baskets.
(5) 6 Balls Macramé Cord.
(6) 1 lb. Yarn.
(7) 50 Pasteboard Raffia Frames.
(8) 2 Packages Raffia Needles.

(9) Blue Prints for Nature Work.
(10) 3 doz. Brass Pins.
(11) 50 Sheets Drawing Paper.
(12) Hair Pins for Dolls' Furniture.
(13) 1 Jar Paste.
(14) Cardboard Rings, Discs, and Strips (Assortment of).

KINDERGARTEN DEPARTMENT

(1) 50 Pairs Scissors.
(2) 12 Balls.
(3) 1500—4 x 4 Paper.
(4) 150 Crayons.
(5) 300 Sheets Drawing Paper.
(6) 2 Boxes 12 in. Straws.
(7) 3 Packages Raffia Needles.
(8) 2 Spools Silkateen.
(9) 1000—6 in. Chain Strips.
(10) 2 Quires Tissue Paper.
(11) 2 Boxes Puffed Wheat.
(12) ¼ lb. Gum Tragacanth.
(13) 1 Music Book.
(14) 2 bundles Slats.

The average cost of industrial materials for a school of one hundred children is $40, if all have to be bought. It is impossible to give detailed prices because they change with different years and varying economic conditions. For lowest current prices, communicate with National Headquarters. Schools that are located in places where supplies cannot be obtained will be helped out by Headquarters.

The School Term

The school term of six weeks begins on the Monday following the Fourth of July and the sessions are held daily except Saturday and Sunday. The forenoons are devoted to organized school work as described in the program following. The entire staff is expected to be at the church at 8:30 in the morning and to remain until the records of the day are completed and the rooms have been put in order. The hour between 8:30 and the opening of the school at 9:30 will be needed for street work in looking up children, calling at their homes if necessary, and bringing them to the school. One member of the staff, meanwhile, should remain in the church to prepare for the day's work. The street work will be needed from the first to the last day of school.

DAILY PROGRAM

First Hour

8:30—Preparation and visitation by staff.
9:15—Doors open and registration.

Second Hour

9:30—Opening exercises, all present.
Hymn.
Psalm or other portion, repeated in concert.
Lord's Prayer—said or sung.
Bible Verse and Hymn.
Kindergarten goes out.
Health and Habit Talk.
Thankoffering for Extension.

9:40—Musical period.
Vocal and breathing exercises.
Singing lesson.
Calisthenics with music.

10:05—Bible lesson in three groups.
Taught with sand-table, or
Given with stereopticon, or
Told as story by the teacher.
Verbatim passages taught.

Third Hour

10:30—Manual work and play in sections.
Hammock-making.
Elementary Sloyd work.
Raffia work.
Basketry.
Sewing.
Weaving.
Work for Children's Hospital.
Bible Blank Book work.
First Aid and Hygiene.
Play, all.

11:25—Closing exercises—School reassembles.

Daily salute to flag.
"America" or Hymn.
Children's Benediction.
March out to music.

Afternoon—Two Hours

2:30—Open-air games organized and directed.
Excursions.
Visitation of homes.
Student Conference, Monday.

Records

An attendance card should be given to each child when he or she first enters the school and should be punched every day that he or she comes.

A Report Card showing the number in attendance, etc., should be filled out and mailed daily to the Superintendent of the Schools as the Principal leaves the School. The Superintendent should enforce this measure.

To keep a complete record of the Schools is impossible unless every School sends this daily Report Card. These records are of the greatest importance to the local Superintendent as well as to the National Association. The keynote to any work of this kind is loyal coöperation. In cities where there are several Schools much time and the expense of car fare will be saved the Supervisors if the Principals notify the Superintendent of projected days' outings two days before they occur. "Day's outing" and the date on the Record Card will save futile visits from the Supervisors.

Days' Outings

Days' outings are a happy feature of the Daily Vacation Bible School. Their frequency is left to the discretion of the Principal under the sanction of the Superintendent. The last week of school should have no outing. All attention then should be focused on preparations for the closing day. At intervals during the school term, the entire school or the girls alone, since the boys are cared for by the Principals every afternoon, should assemble at the church for some kind of a treat—lemonade and cake or ice cream and cake—and at these times there should be games and a general festive occasion. The church committee or friends should provide funds for these treats.

Introductory Conference

Preceding the opening of the Schools the first of July, there should be a Three-Day Conference of five sessions and every Principal and Teacher should answer to the roll call at the opening of each. These sessions should be devoted to general exercises of an inspirational nature and to a definite outlining and planning of all the various departments of the Schools—Bible, Music, Industrial, and Kindergarten, each under the direction of its supervisor.

Monday Conference

Every Monday afternoon during the school term, a conference should be held in some central place at which every Principal and Teacher should answer the roll call. The program should include an open discussion on the experiences and problems of the previous week, an outline and preview of the Bible and Music work for the week, and a full hour should be given for Industrial and Kindergarten instruction in the coming week's work, with the Supervisors in charge of their various sections.

Commencement

The exercises of the closing day of school should be left to the discretion of the Superintendent. Where it is feasible,

it is an advantage for all the schools of the city to meet in some central hall for a general celebration. In any case, each school should have its own commencement. Programs for the day should be made up largely of concerted exercises by the children and exhibition of the work done by the industrial classes and they should include recitals of the portions of Scripture learned during the term and the giving out of medals to those who have learned all the passages prescribed by the course.

Local Organization

In cities where the number of schools warrants it, there should be a local Daily Vacation Bible School organization with a central office and Superintendent and Treasurer. This organization should be affiliated with the National Daily Vacation Bible School Association which, from its central office in New York, will advise on all vexing questions and furnish help as it is needed. The local Superintendent should select the Principals and staffs of the schools and pass on all volunteer helpers. The Superintendent should be ready at all times to confer with Principals and Teachers on difficulties and problems. Four Supervisors will be needed, each a specialist in her department—Bible, Music, Industrial, and Kindergarten.

How to Start a School

To start a school, the first step is the raising of the necessary money and the finding of a church to house it. A school may be supported in various ways: by the church in which it is to be held; by contributions from societies and individuals in the church where it is to be held; by a group of churches in a neighborhood, when it becomes a neighborhood school; by a school or college; or, as a memorial to one who has gone. Various schools and colleges have furnished the money with which to pay the teaching staff of schools. In such case, the school may take the name of the school or college by which it is supported. In the case of a Memorial School, the school takes the name of the person for whom the memorial is given. When a college or church provides the money for a school, it may select its own staff under the sanction of the Superintendent. But to save complications, all moneys should be paid to the Local Treasurer and all salaries should be paid by him.

Local Auxiliary

In every city where there are a number of schools there should be a local organization which is federated with the Daily Vacation Bible School Association. This organization should be made up of representatives from all the Protestant churches of the city and its work should be the interesting of the public in the work of the Daily Vacation Bible Schools, the extension of these schools throughout its own city and county, the raising of money for needy schools, and a keen interest in the success of such schools.

Women's National League

The women members of the local organization should form a local branch of the Women's National League of the Daily Vacation Bible School Association. The work of this National League is to carry on Schools of Methods, the annual bazaar, annual luncheons, and in other ways to help in the raising of funds for the extension of the work throughout the country.

To lose sight of the children of the Daily Vacation Bible Schools when the schools close in August is a sad economic waste from both the social and religious standpoint. If the work has been done with the right spirit during the school term, a bond of friendship has been established between the children and the church and this spirit is bound to react on the families and the neighborhood to which the children belong.

After School Closes

The beginning of the fall Sunday School work is the time to make this friendship permanent by looking up the children of the school and inviting them back to the church if they have no other church connections. For this reason the children's registration and attendance cards which are to be kept daily by the Principals should be turned over to the proper officer of the church upon the close of school.

It has happened more than once in the cities that the mob has hissed a speaker who has mentioned the Church and has applauded later at the name of Christ. The mob recognized no connection between the two—the Church and Christ. In what surer way can the Church demonstrate to the masses that Christ and the Church are one in Love for His People than by giving its big cool rooms to little ones who have only the sidewalk for a playground during the most trying weeks of the year?

CHILDREN'S FREE WILL OFFERING

The Daily Vacation Bible School should be absolutely free to the child. But an opportunity should be given in every school for a Free Will Offering from the children and their parents. This offering should be taken in such a way that those who cannot give may not be embarrassed. In some schools a jar or box with a slot in the top is held by a child while the children march past singing, dropping their pennies as they go.

In some schools envelopes are used. This Offering should be taken after the Habit Talk and it should be carefully explained that it is to be used for National extension work, to make new schools possible in places where they could not be established without the assistance of the National Association.

SCHOOL OF METHODS

In every city where there is an allied group of schools, a School of Methods should be held weekly for from six to ten weeks to prepare the teachers for their summer work. In making appointments, members of this school should, as a rule, be given the first consideration. This school should have a Principal and if it is possible, the Supervisors of the various departments of the Daily Vacation Bible Schools should take charge of their respective sections. During the sessions there should be a preview of the work laid out for the summer with instruction in methods which characterize Daily Vacation Bible School work. In some cities where there is a resident staff these Schools of Methods are held throughout the winter and are open to social workers and Sunday School teachers as well as to Daily Vacation Bible School teachers.

A program of the New York School of Methods follows:

BIBLE STORIES—With Historic and Geographic Setting.
MUSIC TRAINING—How to teach children under fourteen years.
MANUAL WORK—Sewing, Weaving, Basketry, Raffia Work, Chair-caning, Hammock-making.

Weekly Outline of Study:

9:30—Practice of Opening Exercises of a D. V. B. S.
9:50—Music Lesson. 10:40—Bible Lesson.
11:30—Manual Lesson. 12:15—Question Box, Closing Exercises of a D. V. B. S.

Special Topics:

Games and Gymnastics.
Discipline, Reverence, Patriotism.
Duties of Staff; Use of Registration and Report Cards.
Children's Thank Offering; Hospital Work; National Exhibit and Sale.

Special Training for Kindergartners at Every Session.

Fee for entire course $1.00.

Working for a Children's Hospital

CHAPTER II

FUNDAMENTALS

(1) The aim in manual work should be, not the making of things, but the making of more efficient boys and girls. Since careless work strengthens bad habits, accept no result that is below the real capability of the maker. Treat defects in work as a serious matter and aim to influence the boys and girls so that they will volunteer to take out poor work in order to do it better. The work hour after the Bible Study is the best time for close personal influence.

(2) In making the following suggestions for industrial work the intention is not to cramp the freedom and originality of the staff. Where members of the staff have had special training or have natural facility for other lines of work, it is for the welfare of the schools that these gifts should be brought into play. Any branch of Domestic Science or Domestic Art may be introduced. The models here submitted may be so varied as to produce a great variety of articles, and it is hoped that each school will develop original designs.

Every child in the class should understand the purpose of each piece of work which he or she does—whether it is to become his or her own, or the school's, or whether it is for the bazaar, the hospital, or other philanthropy. This will save disappointment and will stimulate interest and effort. In this department more than elsewhere, there is opportunity to arouse the spirit of generosity and effort for others. The children too have the privilege of making some return for what the school has done for them.

A bazaar under the direction of the Women's National League of D. V. B. S. A. is held yearly in New York for the sale of work done in schools throughout the country. Every school is asked to contribute two articles made by the children for this sale, and to send them to National Headquarters at the close of the school term. The proceeds are turned over to the National Association and are used to extend the work throughout the country.

Every school, too, is asked to dress and send two dolls to the children's ward of the nearest hospital with a bedstead that fits one of the dolls. This work is valuable not only because it is altruistic but also because it allows coöperation between the children of the class. Several members of the sewing class may be engaged on the various clothes of the dolls' wardrobes and on the mattress, sheets, pillowcases, and spread of the bed. In some cases it is well to give these articles to shut-in children known to members of the class. Boys in certain schools have made box furniture and hammocks for the doll's outfit. Other pieces made in the various industrial classes should be given to the children who make them or be assigned by the principal and teachers to some practical use, such as a sale for the benefit of the school another year. There is no surer way to interest the city in Daily Vacation Bible School work than by making a display of work done by the children during the summer in some public place such as a vacant store window on a much traveled thoroughfare.

Care must be taken to avoid any sign of partiality in the distribution of work.

At the Training Conference which precedes the opening of the schools, the Industrial Supervisor should present an outline of the entire work to be done during the term, in order that the teachers may know what materials are to be required. Children in some cases can bring material for their own little garments—underwear and aprons and even very simple one-piece dresses—always of wash fabrics.

GENERAL SUGGESTIONS

(1) Have all work planned on the previous day. Know how much work you wish accomplished and what models you wish to use for all grades.

(2) Have each child's work prepared with the child's name attached. In order to avoid confusion and delay have all raffia, reed, or other material placed ready for use, where the lesson is to be given.

(3) Before the children are allowed to claim any article, they should, if possible, pay for the material to be used, and no article should be removed from the building until after Commencement.

In the case of hammock needles a deposit of three cents should be made by each boy, to be returned to him when he surrenders his hammock needle in good condition.

(4) Articles completed should be marked with labels, such as those supplied, and hung in the schoolroom for decoration and exhibition.

(5) Work intended for donation to hospitals should be the outcome of

intelligent sympathy, therefore let a committee from each industrial group visit and decide upon a definite hospital, and let every member of each group share in the contribution.

(6) There is no part of the school in which the danger of selfishness is so imminent as in this department. The spirit of graft is easily encouraged. While avoiding this danger do not fail to recognize the natural and just desire of children to make pretty and useful articles for their homes and for themselves.

(7) Watch lest the children imbibe habits of untidiness by leaving the floor littered with bits of raffia or other material at the close of the industrial hour. Have each child leave his or her work in order and have the children take turns in tidying the room. The value of the industrial hour lies as much in teaching habits of neatness as in making attractive articles.

(8) Organize your class by a system of group leaders, so that requests for materials or assistance may come through them, otherwise you will be surrounded by a clamoring mob of children and the atmosphere of the room will become disorderly.

(9) Let each school send to the National Director specimens of its best work, which will be placed on exhibition and subsequently serve as models. Each article, carefully tagged with the name and age of its maker, and the name of the school, is an incentive to other children to do good work.

(10) In order to insure prompt receipt of material, notify the Industrial Supervisor two full days before it is required and arrange with her as to the method of delivery.

(11) Before entering her class every teacher should have made a perfect model of the piece which she is to teach.

(12) Every teacher should have a workbag with her equipment—tape-measure, scissors, pencil, small note-book, pin cushion, needle-book, thimble, thread, and emery bag. If her class is advanced she will also need a tracing wheel, buttonhole scissors, and shears. As an example to her class, if for no other reason, she should wear a neat sewing apron.

(13) To facilitate the distribution and collecting of work and to keep each child's work separate, every member of the class should have a work-bag marked plainly with her name, and these individual bags should be kept in a large class bag.

(14) Have an intimate talk with the children the first morning, show only the models which they are able to make and give them an opportunity to choose the kind of work that they like best to do. Then make it very definite that they must finish each piece begun before commencing another. Outline to them the work to be done during the term. This will interest and encourage them to come regularly.

(15) Have their work ready when the children come into the class. If chairs are movable and there are enough of them, they may be used for work tables if tables are lacking. Arrange a crescent of chairs with the backs towards the teacher—these are for tables. Then arrange a second row facing the teacher—these are for seats. Only half as many will be needed for tables as for seats because two children can put materials and utensils

on one chair. Benches may be arranged like this in a hollow square. Have regularly assigned seats for the children and have their workbags in them when the children come in. Let them leave the bags there when they go out. This will do away with those difficult periods of distributing and collecting.

(16) Do not make anything in the class which is without some utility value. Have articles that are made as useful and attractive as possible. If a girl or boy plan the article which he or she is to make, so much more of the educational element will be added. *Have the growth of the child, not the finished piece of work* in mind at all times. Hold this thought constantly, *How well, not how much.*

(17) When a class has finished with a model have an exhibition of the work. Let the children decide which piece is best and give the reasons for their choice. If several classes are doing the same work, appoint judges. Let everything throughout the school be a manifestation of the children. In sewing, crocheting, knitting, and other work of the kind, make it emphatic that clean work cannot be done with dirty hands nor on a soiled dress or apron. After the sewing classes have finished their second model, the sewing apron, have the girls put their aprons on daily before beginning their work.

It is to be expected that many summer days will be uncomfortably warm and sultry for both teachers and children. During the school hours, it is incumbent upon the teachers to overlook entirely their own discomfort and to show no sign of it to their pupils. A tired, listless teacher means an inattentive, restless, and finally disorderly class. When the spirit of restlessness becomes too marked during the industrial period, stop the work. It will not be done well while things are in this condition. Sing a song, play a game, or, if the day is too warm for even slight physical exertion, tell stories until there is a change in the mental attitude of the class. Remember that it is a "vacation school" and that while system and order must be maintained, the happiness of the children is a prime consideration from beginning to close. Books on games and story-telling are many and the teacher who is most successful is the one who is supplied with such resources for a time of need.

SPECIFIC INSTRUCTIONS

A. FOR BIBLE MANUAL WORK

(1) Bible work may be made an integral part of the industrial hour. Each group should prepare a blank-book record of the Bible stories illustrated with pictures and maps to be sent, after Commencement, to the Association headquarters.

Perforated leaves of uniform size may be obtained. Let the binding and decoration of these Bible blank books appeal to the pride and artistic instinct of the group. Leaves may be made of cambric or heavy wrapping paper, and children will fold, cut, and perforate them.

From the series of Perry pictures or those of the Bureau of University Travel illustrations may be selected for these Bible stories. They should be pasted upon the blank leaves and the children should write original summaries of the stories and make the finished pages into books.

Discarded Sunday School charts, papers, etc., will provide material for this purpose.

(2) Maps drawn with the mountains, rivers, etc., shown by different colored crayons, may be made to illustrate the countries described in the Bible blank books.

(3) Nature books may be formed upon the same principle for the study of fruits and flowers.

(4) Animal books and books of heroes and of historical events will also prove helpful.

(5) Sand-table exercises by the children during the manual hour, and under direction, can be made to promote interest in Bible lands and give clearer ideas of their topography. Wonders of the earth's surface may also be illustrated in the sand and definite places should be modelled, picturing the environs of the child.

B. FOR THE KINDERGARTEN

Papier Maché and Paper

(1) Strips to decorate the room may be made by cutting fancy discs of colored or white paper about one inch and one-quarter in diameter and threading them alternately with inch length bits of papier maché straws. Ordinary shelf paper will answer for this purpose. Small squares of tissue paper, crumpled in the center, may be used in place of the discs.

This will keep the children interested and occupied while the teacher attends to other classes.

(2) A series of paper articles for a farm set may be drawn, cut out, and folded. These would include a cart, wheelbarrow, barn trough, shed, hoe, rake, etc.

(3) A set of furniture would consist of a bed, table, bureau, chair, sofa, piano, etc.

(4) Paper rugs and screens may be decorated with designs which furnish opportunity for developing originality in the children.

See also directions under Bible blank books, etc.

The suggestions here offered are intended only as supplementary to the activities of the kindergarten, the program of which is presupposed.

C. FOR THE SMALL BOYS AND GIRLS

All models furnished may be used *with discretion*, giving the easy ones first, so that the children may feel that some definite article is completed. Models 17 to 24 are more difficult than the earlier numbers and should not be attempted until the boys and girls have acquired some facility in handling the raffia.

Kite-making attracts the boys, and any other occupation known to the teacher may be introduced.

D. FOR OLDER GIRLS

(1) Encourage the girls to make practical use of the weaving and other stitches learned in the raffia work, by mending and darning their own clothing.

All varieties of fundamental stitches may be applied in hemming handkerchiefs and dishtowels, and in making aprons, shirtwaists or other garments. One class wore at Commencement the dresses made during the school term. Let the girls furnish their own material for these larger articles, and as their taste may not be always good the teacher can quietly direct the choice of material.

At least once a week have darning and mending lessons, encouraging the girls to bring and mend their own clothing. When practicable, make this work more interesting by reading a short story while they are busy. If feasible, offer a reward for the largest number of articles nicely mended.

(2) Have each school furnish a doll's bedstead to be given to a children's ward in some hospital. Make matress, two pillows, two sheets, two pillowcases, blanket, and counterpane, applying each stitch learned. Stuff mattress and pillows with tiny bits of raffia saved each day, paper torn or cut in small pieces, tiny bits of leftover material or anything that will stuff without making lumps. This will furnish occupation for nine girls, thus making it a representative gift from the school. The girls may be taught by this small outfit how to make up a bed properly.

These beds and other pieces of furniture may be made of wood or from pasteboard boxes.

An entire doll house may be furnished, the older boys making the house from packing boxes. The curtains, rugs, bed spreads, etc., may be woven.

E. FOR OLDER BOYS

The following occupations are attractive and useful:

Rake Knitting: Rugs may be made over the teeth of a rake as the spool knitting is done. The boys can make their own rakes by inserting dowels in a piece of wood.

Rug Weaving: A loom can be made of four pieces of wood (like a slate frame) with nails driven in top and bottom to hold the warp, or a good loom may be made of the covers and bottoms of boxes, by notching each end to hold the warp. Carpet factories will give odd bits of wool which can be woven on the loom and then the pieces may be sewed together for a rug. Rugs may be woven over packing boxes.

Chair caning: Boys may bring chairs from home, and pay for the cane required to repair them.

Carpentry: With a few tools the boys could be taught to make many attractive articles which would be of use in their homes, and the hammock needles could all be made in the schools. Furniture, etc., may be made of packing boxes.

Scrap Basket, Model 2 Doll Scrap-book, Model 1

CHAPTER III

CONSTRUCTION

A. PASTING

I. Material:

Spon-tem is a paste powder which is sold in any quantity at ten cents a pound, and is more economical than ready-made paste because it may be mixed in quantity sufficient for each day. It is found where book-binding supplies are kept. To prepare it for use mix with water, putting each child's portion upon a piece of cardboard or into a small pan or shell. Wooden splints are advisable for applying the paste, when only a small amount is needed. When a large surface is to be covered, apply with a soft brush or cloth.

II. Models:

Paper cambric scrapbook. 9 x 12 in. is a good size. Cut two yards of material lengthwise for two books, and have the selvage towards the children for the bottom of the page. Many children may be engaged on this book at the same time, some arranging and some pasting, while others cut out the pictures. Have one such book made in each school for a children's hospital. Interest the children who are well in giving happiness to their sick little comrades.

Great care should be used in the selection of color. Olive green and seal brown are safe tones for a background. To prevent fraying, notch the edges

or blanket stitch or overhand them with some harmonious color of cord such as silkateen, etc. Paste attractive colored pictures on the outside. These books may be used to mount pictures illustrating the Bible story, habit talk or nature talk, or for pictures of basketry, samples of sewing, or hand embroidery. The older children may keep them as a record, thus framing each day's program, illustrated by descriptions, pictures, and models. In all things bring out the individuality of the child and endeavor to have one occupation dovetail into another.

Scrapbook with Paper Doll: (Model 1.) This is a good gift for a hospital. Dimensions of page 6 x 9 in. Fasten the pages together with raffia or cord of an attractive color. Fashion books and magazines often have pages of paper dolls that the children may cut out and mount in these books. Colored fashion plates are a substitute for dolls, the children making the dolls' clothing of colored paper or painting the cut-out, uncolored fashion plates. The number of pages will be determined by the amount of material for the book. Four leaves, including the front and back, are usually enough. Use heavy manila wrapping paper or manila drawing paper. Pockets of paper are fastened to each page to hold the doll, dresses, and hats. Paste on a paper pocket near bottom of page and gum a strap one-third distance from top.

Scrap Basket: (Model 2.) This model is popular with the older boys who can calculate dimensions. The basket may have a square or round bottom and the sides may be straight or sloping. Sloping sides are more attractive. For a useful basket make the base 8 inches square, and side pieces 12 inches deep, for the height, and 8 inches at one end and 10 inches at the other. If a circular basket is wanted, cut a round base 10 inches in diameter and a rectangle 12 inches deep and long enough to go around the base.

Samples of wall paper to cover the cardboard foundation will be given by firms who sell wall paper. Some of the children may be able to collect left-over rolls from their own or their friends' homes. Suit boxes and backs of tablets make excellent foundations for baskets. The ingenuity and individuality of teacher and pupils together will work out useful articles at trifling cost.

Pasting: In pasting, cover the cardboard rather than the paper with paste and place this pasted side upon the wrong side of paper. Press firmly until perfectly smooth. To begin, lay the larger piece of paper wrong side up on a smooth table or board, place on it the pasted cardboard, paste the four flaps of the paper, and fold over the edge. Cover all pieces on one side first so that the first piece will be dry before covering the second side. Cover the second side of cardboard with paste and place upon the smaller piece of paper that just fits it.

Joining: Punch holes along the sides 2 inches apart and ½ inch from edge. Fasten together with raffia, or cord.

The boys and girls can coöperate, the boys covering paper boxes with fancy paper or cretonne for girls' sewing boxes.

Additional suggestions will be found in the following books: *Manual*

MADE BY DAILY VACATION BIBLE SCHOOL CHILDREN.

Training—Cardboard Construction, by J. H. Tryborn; *When Mother Lets Us Cut Pictures*, by Ida E. Boyd, published by Moffat, Yard & Co., N. Y. City.

Doll Furniture and Toys Made of Pasteboard Boxes: (Model 3.) Many helpful suggestions may be found in the following books by G. Ellingwood Rich, published by Moffat, Yard & Co., New York City, *When Mother Lets Us Make Paper-Box Furniture* and *When Mother Lets Us Make Toys*.

B. RAFFIA

I. MATERIAL:

(1) Wet the natural raffia before using it, and as you work, *dampen it a little unless using it over cardboard.* The best way to prepare raffia for use is to wrap it in a damp cloth for a day or two.

(2) All raffia in use should be opened and the bunches hung up so that threads may be easily drawn.

(3) Give each child a few strands only, at a time, to avoid waste and to inculcate a spirit of economy and carefulness.

(4) The children will at first call for colored raffia, and unless influenced and guided, will make crude combinations. More artistic results are obtained by using very little color.

(5) When making discs for single weaving, have an odd number of holes, 11, 13, 17, etc.

(6) When braiding raffia, make one long string which may be turned back and forth to fit the length desired when finished.

(7) For burlap mats or other work where the effect of beads is desired, melon or squash seeds may be used, after soaking, by threading with a sharp-pointed needle.

(8) Save bits of raffia to stuff mattresses, pillows, cushions, etc.

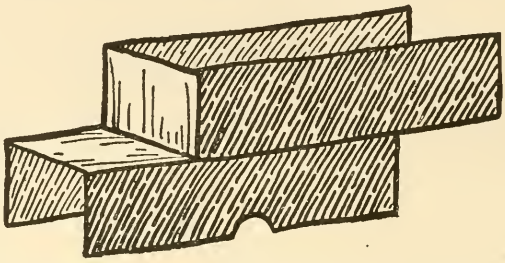
(9) Raffia is the product of the Madagascar palm. It is sold at retail in large hanks at 25c.–40c. a pound. The wholesale price is less.

II. MODELS.

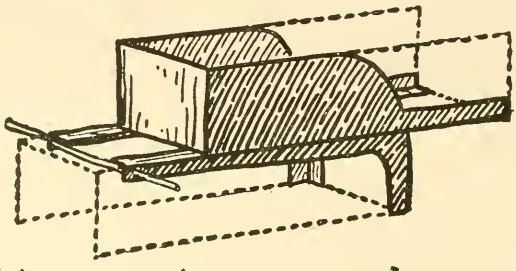
A. RAFFIA USED WITHOUT OTHER MATERIAL

Doll: (Model 1.) This may be made interesting by braiding the raffia for the hair or for a hat, using colored raffia as ribbon. Cut strands of raffia 14 inches long. The size of the doll determines the amount of raffia needed. Tie all firmly together in middle. Double the strands, using the place where they are tied together for the crown of the head. Before tying down for the neck, separate from the main portion of the raffia a sufficient quantity for the hair. For a girl doll have the hair 4 inches long, braid and tie with colored raffia at top and bottom. One inch below crown, tie with raffia to represent the neck line. Then from the main portion separate strands of raffia on either side to serve as arms. Cross so that the strands from the right side form the left arm and vice versa. The remainder of the

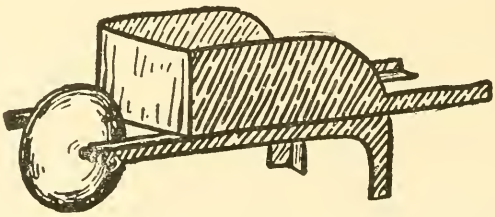
Candy box and cover



Box fastened through bottom to top of cover
One end of each cut away.



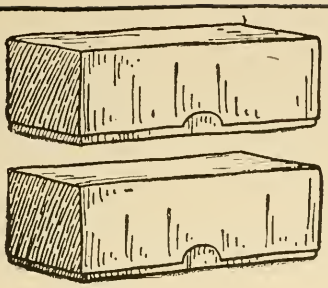
Parts of box and cover cut away to form
legs-handles-body-wheel supports



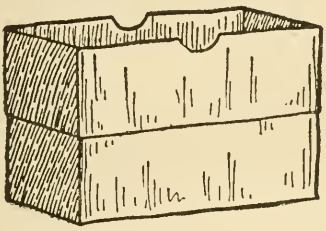
Two button molds glued together to form wheel.
Hair pin axle-beads on axle each side of wheel.

Details of Wheelbarrow.

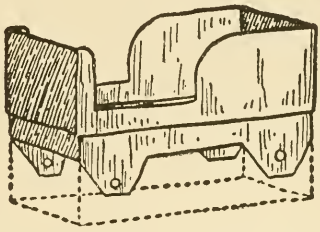
FROM "WHEN MOTHER LETS US MAKE TOYS,"
BY G. ELLINGWOOD RICH, COURTESY OF MOFFAT, YARD AND COMPANY



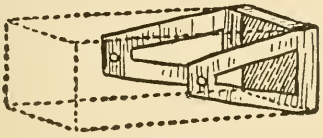
Two candy boxes-same size
Eight wooden button molds
About 18 inches of copper wire
A few beads



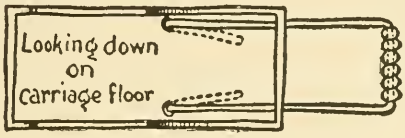
Box- bottom up
Cover fastened to it



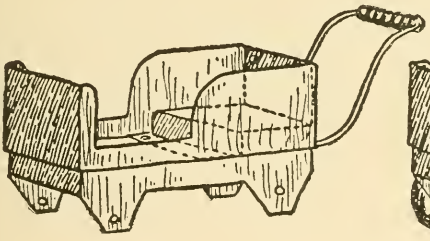
Body of carriage shaped
Bottom shaped to hold axles



Canopy cut from one end of the second box



Wire pushed through holes at back- down through holes in floor- bent back flat under the bottom

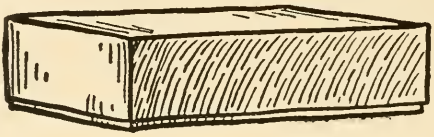


Handle bent up and curved-wires covered by seat

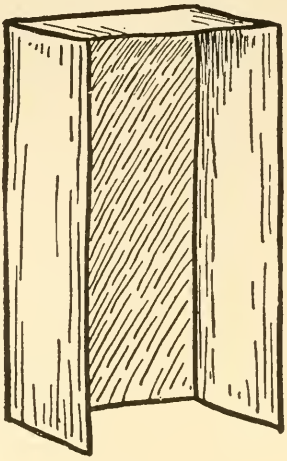
Canopy pivoted with fasteners
Wheels=two button molds glued together-hair pin axles

Details of Doll Carriage.

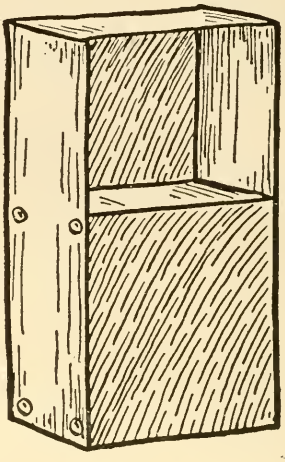
FROM "WHEN MOTHER LETS US MAKE TOYS,"
BY G. ELLINGWOOD RICH, COURTESY OF MOFFAT, YARD AND COMPANY



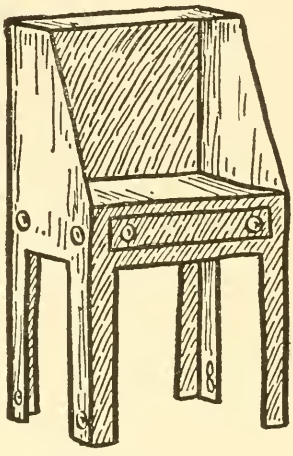
Candy or
note paper box



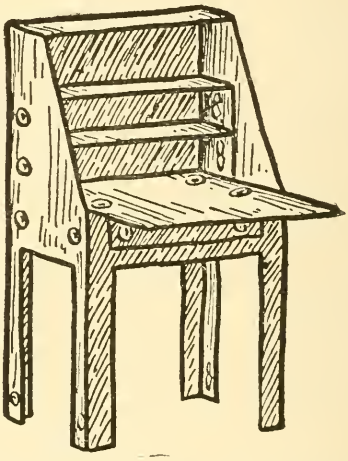
Cover-
End cut away



One end of box fitted in
and cut off as in dresser



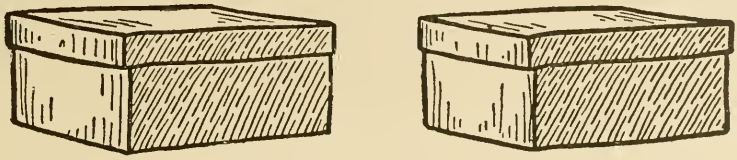
Top and legs cut-
Drawer front fastened



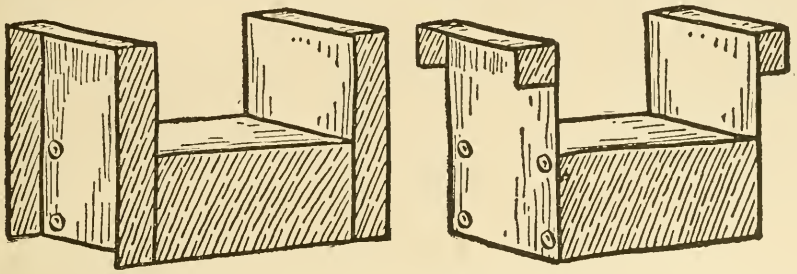
Extra piece projecting
for writing shelf-other
end of box fitted in for
shelves as in book case

Details of Writing Desk.

FROM "WHEN MOTHER LETS US MAKE PAPER BOX FURNITURE,"
BY G. ELLINGWOOD RICH, COURTESY OF MOFFAT, YARD AND COMPANY

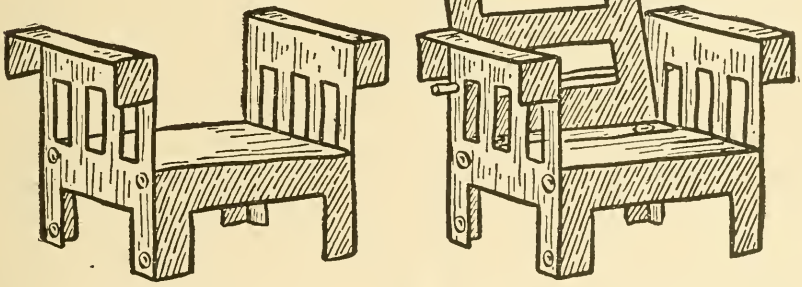


Two boxes-same size-nearly square
Extra piece of cardboard for back
Large chair=collar boxes – Small chair=jewelry boxes



Invert box for seat
Fasten covers for sides.

Portions of cover edges
cut away to form arms.



Shape the legs
Cut slats in arms.

Fasten back to seat
Rod=meat skewer or hair pin

Details of Morris Chair.

FROM "WHEN MOTHER LETS US MAKE PAPER BOX FURNITURE,"
BY G. ELLINGWOOD RICH, COURTESY OF MOFFAT, YARD AND COMPANY

raffia with this crossing of the arms forms the thickness of the body. Tie at the waist 1½ in. below neck. Give a sash of colored raffia. For the boy doll, separate strands for legs and tie with raffia for ankle line.

Doll's Hat: (Model 2.) Wind together at one end nine uneven strands of raffia, fasten the tied end to a firm surface, and make a three-strand braid, adding a new strand of raffia from time to time, braiding it in with the original strand for an inch as it is needed, and letting the ragged ends hang out until the braid is complete. When it is long enough wind the end firmly and trim off all ends. Coil the braid into a small mat and sew the coils together row by row shaping gradually into a hat.

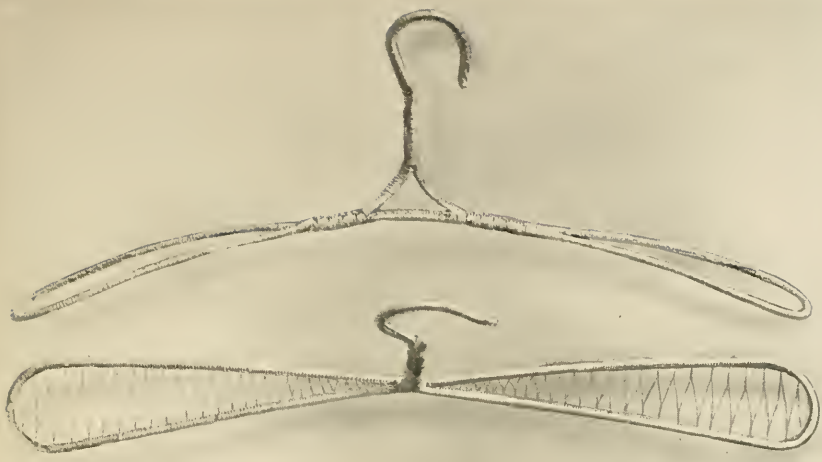
Knotted Horse Reins: This interests small boys. Materials: 16 full-length strands of raffia, 3 sleigh bells, and two 1-in. brass rings. Breast-Piece, 10 in. finished: Cut 6 strips of raffia each 13½ in. long. Slip a sleigh bell over 2 of the strands to the center and knot the full bunch 1 in. from it on each side. Slip a sleigh bell over the other 2 strands, one on each side, and inclose each with a knot 2 in. from the first. Knot each end to a ring. Head Piece 12 in. finished: Cut 6 strands of raffia 13½ in. long and knot the same as the breastpiece but omit the bells. Tie the ends to the rings. Pair of Reins 24 in. finished. Knot 6 strands as before and tie the ends to rings. When raffia is too short tie in new ends at knots.

Knotted Bag: (Model 3.) This cover for a tumbler, flower holder, fish globe, etc., may be decorated with a bead above each knot. If simply knotted and lined, a workbag is the result. This bag lends itself to a variety of knots from the most simple to the most complex. Use simplest knotting with younger children. Many beautiful designs may be worked out. For the more elaborate baskets and bags the children should first decide upon the use of the finished article, next upon the knots to be used, and finally upon the design. Raffia of various colors may be used or colored beads may be introduced.

Materials: 8 strands of raffia and one 1½ in. brass ring. Double each strand and fasten over ring with a slip knot. This is the bottom of the bag. Make a single knot with the same pair of strands 1 in. from its own slip knot. Keep the knots uniform in size. 2d row: Knot a strand from one pair with a strand from the next pair 1 in. below the previous row. Make a third row 1 in. below second, splitting the pairs. Above each slip knot slip a colored bead and make a knot above the bead. Separate the strands and make one row of knots. One in. above, knot the strands without separating. Four in. above, knot all the strands together.

Knotted Bag: Cut a piece of cardboard the width of the bag to be made and 1 in. longer. One inch from one end put a notch at each side. Tie a cord firmly around the cardboard at this part. Knot the strands over this cord the same as over the brass ring in the preceding model. Follow the directions for knotted bag given above. When the required length is reached, knot the back and front strands together and cut the ends off evenly for fringe.

Whisk Broom: (Model 4.) The handle may be made of braided loops or be simply wound. Double a bunch of raffia 16 in. long. Tie in center



MODEL 2

MODEL I

with colored cord forming a loop that will serve as hanger when broom is complete. Divide entire bunch into thirds and braid for 2 in. Tie with colored raffia. One in. below flatten to required width and stitch across in and out to make the brush firm and shapely. Cut even at bottom.

Whisk Broom: Wind a ring made of raffia or brass with raffia until it is covered. This ring which forms a handle should be 1 to 2 in. diameter according to size of broom. Loop a bunch of raffia 16 in. long through the ring and tie securely below.

Belt: This may be made of narrow braids joined with fancy stitches, or of one wide braid of several strands. Buttonhole a ½ in. brass ring with colored raffia. Loop two full-length strands of natural raffia over this ring in uneven lengths so that joinings of new pieces will not come together. Divide these strands into three even parts and braid 12 in. This makes a miniature model. It can be used with a small ring as belt for large raffia doll. Repeat this looping and braiding twice. Join the three braids with a catch stitch, feather stitch, or other fancy stitch of raffia to match the ring. To finish belt, divide the three braids into two parts with the colored raffia used in stitching the braids together. Braid these parts for 4 in. Tie securely with colored raffia 1 in. from end which forms fringe. A full-sized belt in harmonious colors may be made to match the pocket described later.

B. RAFFIA OVER CARDBOARD

(Model 5.) **Book Mark for Magazines:** This simple model introduces the child to fundamental ways of handling raffia. It is a good model for the opening day of school as it is small and can be finished quickly. It is excellent for teaching knotting and simple wrapping. Raffia must always be put on flat, each wrapping lapping a little the previous layer. Knots should all be made on the same side of the cardboard. A longer and wider piece of cardboard forms the base of a napkin ring. Use a piece of white cardboard 1 by 5 in. with 3 circular holes ¼ in. from each end. Cover with plain winding, using natural raffia. For the older children a color may be introduced as a border. Wind ¾ in. natural and then ¼ in. color at each end before putting in the center. At the first and last end the strands should pass through one of the holes and be incorporated with the fringe.

Fringe: Form a slip knot through the hole. Fold raffia in half, slip fold up through hole. Thread two ends through loop. Pull down gently to end of cardboard. Finish fringe on one side.

Napkin Ring: This may be wound simply or it may be buttonholed on each edge. Buttonholing is done with two strands, one at each side, used alternately. For variation, use two colors. To join strands thread the new end through a loop of the buttonhole stitch with the old strand, and tuck ends under windings. This model on larger scale forms sides of work-box model. (Model 7.) The napkin ring may be decorated with colored raffia run through the center or with cross stitch or other design. Mailing tubes cut in sections 1¾ in. long make a good foundation. Heavy cardboard 1¾ by 7¾ in. can be used—the kind that bends without breaking. On

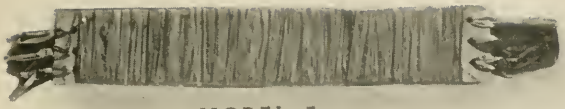
each end ½ in. from edge punch three holes. Bring one end over the other and sew the two ends together through the holes, using a full-length strand of raffia that will begin the winding. For simple winding proceed as for Model 5.

(Model 6.) **Whisk-Broom Holder:** One large and two small circular or oval cardboard foundations. The small pieces should each be ¼ in. broader than the radius of the large piece. Cut out the centers of all leaving 1 in. frames. Wind all the pieces like the napkin ring and join, sewing smaller frames together first and then their outer edges to sides of large frame. Make narrow braided raffia loop for hanging. The centers of the smaller pieces may be filled in with spider-web weaving.

This model serves as a basis for other models. The large circle makes a picture frame or the top and bottom of a work box (Model 7).

Blotter: Use small frame of Model 6. This frame may be wound or buttonholed. By combining two buttonholed frames with Model 7 a string box is made. The larger the opening in the foundation the more easily the child will work. Always keep the raffia flat. Fill in center hole with spider web. Secure to it a holder formed by buttonholing a brass ring. Paste circular piece of blotting paper underneath. To make a penwiper, use chamois or felt instead of blotting paper. To make a needle-book, hinge the two pieces together with a few stitches and insert flannel leaves.

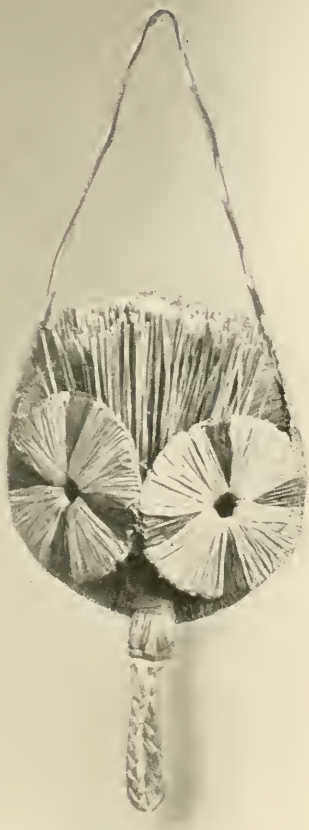
(Model 7.) **Work-Box:** This model, using larger dimensions, serves as review of the napkin ring and whisk-broom holder. Use foundations as described under these models—two frames for top and bottom and one cylinder, fitting these pieces for sides of box. A useful size is 5 in. diameter by 2 in. high. Larger frames make collar boxes; higher cylinders, cuff boxes. The open centers of top and bottom may be filled with plain or fancy weaving described later under "Section Weaving." Buttonhole outside edges of frames and both edges of cylinder. Sew bottom to cylinder and fasten top ¾ in. only for hinge. Sew a colored bead on cylinder for button and a buttonholed strand of raffia to cover for loop. The designs for centers of top and bottom must be finished before the box is put together.



MODEL 5

MODEL 3

MODEL 7



MODEL 6

MODEL 4

Cretonne Covered Work Box Fitted for Prize

CHAPTER IV

SEWING

Small children—up to nine and ten—should use big implements. Eyes, muscles, and nerves at this age are undeveloped, and fine work brings a strain which some children may stand without injury but which may do real harm to others. In sewing, big needles—not finer than No. 6— coarse thread, and coarse materials such as Java canvas, small checked ginghams, crash, kitchen toweling, and burlap are the best. Java canvas is best of all for little children because it is firm and its coarse threads and well-marked spacings furnish lines for the child's needle to follow. Handkerchief cases, envelopes for postal cards, letters, and work, and covers for needlebooks may be made from it. But Java canvas is not cheap, although its width makes the 75 cents a yard, which it costs, less expensive than at first appears. It is best run with colored wools in simple stitches put on in rows that give a fanciful effect pleasing to the child. Burlap is not liked by sewing teachers and it is not used by them unless its small cost makes it necessary. It is loose and pulls out of shape and at best it is ugly in any article that the child can make. Small checked ginghams are excellent because the checks make guides for the needle. Light colored materials are better for the little child's eyes than dark ones but if dark ones must be used, it is a good idea to put a light mark with tailors' chalk along the seam to be sewed. This shows the stitches so that the child can see them readily. Stitches of even size are more important for the small child than fine ones. Let the small girl back stitch her bag of coarse material and be sure that it is strong and

will not rip apart. Pull the seam open for the child to see for herself occasionally whether the sewing is sufficiently close. It is not uncommon to find little children who use the needle with remarkable skill but physiologists tell us that unstrung adult nerves and eyes have often resulted from the encouragement of such early strain.

GENERAL DIRECTIONS

(1) Before distributing work see that the children's hands are clean. Do not accept soiled work. Seats should be so low that both feet of every little girl are on the floor and her lap level. The light should fall over the left shoulder, never in the face.

(2) Every girl in the class should have her own workbag with her name card securely attached to it. These bags should be the first work accomplished by the class.

(3) A sewing apron should be made next and this when finished should be worn at every session. An ideal workbag for a child would contain 1 spool each of Nos. 50 and 70 unglazed white thread; 1 paper each of between needles Nos. 7, 8, and mixed 5 to 10; 1 pair of 6 inch scissors; wax, emery, thimble, short lead pencil, and tape measure. Besides these, she should have a needle-book, pins, and pin cushion. The child can make the needle-book and pin cushion. A work box too should be part of the course and, as an inducement to neatness and diligence, the best work box made in each school during the season, if it is up to the standard, should be fitted for the child at the end of the term.

Overcome the children's usual dislike to thimbles. They must be worn during each lesson but be sure that they are fitted carefully to the fingers that are to wear them.

Do not permit the children to bite thread or to moisten it in the mouth. Both are unclean habits. Biting thread injures the teeth.

A knot on the thread is necessary in basting and gathering but it should not be used elsewhere unless it can be concealed. In seaming of any kind instead of making a knot begin by sewing two or three stitches towards the right and then proceed towards the left over them. In hemming, slip the end of the thread under the hem and sew it in. In finishing, sew back two or three stitches to secure the end of the thread. Cut the thread, never break it.

In cutting materials, it is necessary to know which is the warp and which the woof. The warp threads are the lengthwise ones; the woof, the crosswise. The vertical straight lines of a pattern must follow the warp. These straight lines are always indicated on a perforated pattern. Cut the cloth smoothly and evenly without jagged edges.

In tearing, first snip with the scissors and then pull one piece towards you and the other away from you. If the hands pull from center to sides there is danger of a crosswise tear.

The child new to sewing cannot baste her own work. This must be done for her, and it is imperative that it be well done. A teacher's careless

preparation leads to a child's careless sewing. In every department of the Daily Vacation Bible Schools an uplifting influence upon the child's character is the aim. Negligence induces negligence. Accuracy on the teacher's part will bring accuracy from the child who responds unconsciously to the teacher's attitude.

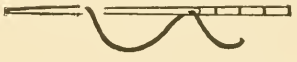
Stitches to be taught: Running, Gathering, Basting, Stitching, Backstitching, Combination-stitching, French-seaming, Overcasting, Overhanding or Top-sewing, Hemming, Felling, and Damask-hemming or Napery-stitching.

Running: In running, the stitches and spaces must be of equal length. The length of the stitch depends upon the fabric and upon the kind of article being made. For very fine running, as few as two threads of the fabric may be taken up although it is not necessary to count the threads because one's eye soon becomes trained to judge the correct length. The thumb and first finger of the left hand should hold the work while the right hand plies the needle. The thimble presses against the needle, pushing it through the cloth.

Gathering: Gathering is plain running stitch done with a double fine thread upon which the fabric is drawn up. Divide the fabric to be gathered into quarters marking each quarter with a notch. If a skirt or other large garment is being made, use separate threads for each division. If the piece is small one gathering thread will serve. Make two parallel rows, the first one quarter inch from the edge of the fabric and the second, one quarter inch below it. To crease the gathers, draw the threads of both rows at one end, pushing the gathers into a close group at the other end, being careful to keep the lines of the material straight between the gathering threads. While the gathers are in a close group with the threads of the goods straight between the two rows of gathering, press them flat with the finger and thumb. This creases them as effectually as the more laborious stroking. Divide the band or other piece to which the gathers are to be sewed into quarters and catch together corresponding quarters of this and the gathered piece. Draw up both threads and distribute the gathers evenly.

Basting: The purpose of basting is to hold pieces of material together temporarily. Be sure that the pieces to be basted are correctly placed. In work prepared for inexperienced sewers, basting stitches should not exceed half an inch in length. This basting thread should serve also for a guide to the line of sewing. It is drawn out when the sewing is finished.

Stitching: On the right side this stitch looks like machine sewing. The stitches should be $\frac{1}{6}$ in. long on the upper side and $\frac{1}{8}$ in. long on the under side. Draw the thread up through the work. Put the needle backward to the right $\frac{1}{16}$ in. and down and forward $\frac{1}{8}$ in.; for the second stitch, back on the right side to the end of the first stitch and down and forward $\frac{1}{8}$ in. Stitching is used where firm joining of fabrics is needed.



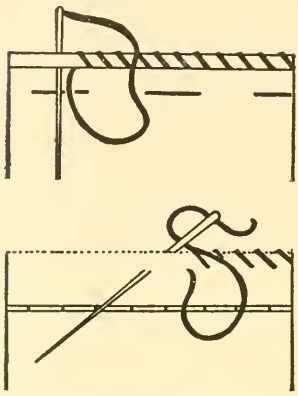
Backstitching: Backstitching and stitching are alike except that in

backstitching there is a short space between the stitches on the right side, and on the under side the stitch is three times the length of the upper stitch.

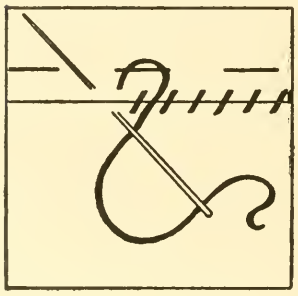
Combination-Stitching: This is a combination of backstitching and running. Use two running stitches and one backstitch. This stitch is used for seams, especially those to be felled.

French Seaming: This was known by our grandmothers as "bag seaming." It is a double seam. Join the pieces with a running stitch $\frac{1}{8}$ inch from the edge on the right side of the work. Trim off the edge of this seam close to the sewing. Turn the work the other side out and make another seam that is deep enough to hide the edges of the seam made on the right side. Use either stitching or combination stitching. The narrower the second seam the more beautiful the work. The French seam is used on undergarments.

Overhanding and Overcasting: These stitches are both done over the edge of the goods. Overhanding, sometimes called "top sewing," is used for joining two selvages or two folded edges. Overcasting is used for covering the raw edges of seams to prevent fraying. In overhanding, the stitches are slightly slanted as they take up the upper two threads of the two edges. To make a flat seam after sewing in this way, open the joining and press flat by drawing the thumb nail backward over the stitching. In overcasting, trim the frayed edges and slant the stitches, taking them from $\frac{1}{8}$ to $\frac{1}{4}$ inch apart over the edges. In overcasting the stitches go deeper into the fabric than in overhanding—about $\frac{3}{16}$ inch from the edge and the same distance apart.

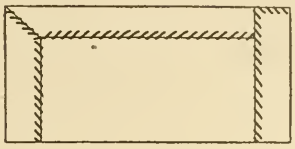


Hemming: A hem is a finish for the bottom, top, or side of a piece of work. Turn the fabric down $\frac{1}{8}$ in. Then turn it a second time the width of the hem desired, using a gauge to keep the hem even in width. These steps may be practiced by the child on paper before beginning the actual work. In hemming, take slanting stitches $\frac{1}{16}$ in. long, putting the needle through the single material just below the hem and slanting it upward through the fold, binding the edge. It is very important that the stitches on right and wrong sides and the spaces between them should be even and that the stitches slant uniformly.

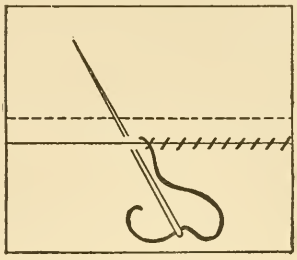


The corner of a hem may be finished square or be mitred. (See illustration of hem.) In a square corner, the hem goes straight across from edge to edge of the piece and the open ends are overhanded. To mitre a corner, turn the hem the same as for a square corner, fold the open end

under to form a perfect bias edge, crease this folded edge, cut out all unnecessary fabric underneath it, fold back, make edges and corners meet and hem down the mitred edge with fine stitches that do not prick through the right side. The square corner is used on narrow hems; the mitred corner, where two hems meet, especially if the hem is more than ½ in. wide. (Drawing of square and mitred corner.) It is more important that a young child make her stitches slant uniformly than that the stitches be small.



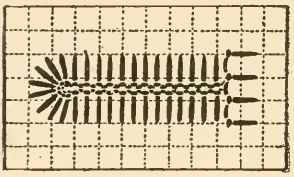
Felling: Felling is used in place of a French seam where a flat seam is desirable, principally in undergarments. Baste the two pieces of the material together, the edge of the under one projecting ¼ in. beyond the top piece. Sew with the combination stitch ⅛ in. from the edge of the top piece. Fold over one half the width of the projecting edge as for the first fold of a hem. Open the seam from the other side of the work and turn the fold flat over making a narrow hem. Hem down as in hemming. If the seam is bias, to prevent fraying, sew in the direction that the threads run, not against them.



Damask or Napery Stitch: Turn and (for the children) baste a hem as for hemming—for a napkin, ⅛ in. wide; for a tablecloth, ⅜ in. Bend this hem directly back so that the fold of the hem and the fold of the cloth below it form an edge and overhand with very fine stitches holding the hem towards you. Fine thread, No. 100 for fine damask, sinks into the fabric better than coarser thread.

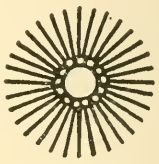
Darning Stitch: Darning is practically weaving. Do not cut off the ravelled threads of the worn place but, holding the worn spot over a firm surface without stretching, stroke them into their natural direction. Begin at one side of the worn spot half an inch from the hole or farther if the fabric is threadbare beyond this point. Now, with a soft untwisted or loosely twisted thread corresponding in weight and kind with the fabric, run back and forth with fine stitches in the direction of the warp and in closely placed rows. These stitches should extend an equal distance on all sides of the hole. Cross these warp threads at right angles going over and under them alternately changing the order at each succeeding row so that the warp threads that were under become the upper threads and extending the woof stitches also beyond the hole. In darning fabrics with silk or wool, the thread will sink into the material more effectually if it is split, unless an untwisted thread can be found. In mending dresses it is often possible to use a ravelling of the material or even a hair from one's head. If a hair is used thread the root end into the needle. In mending a thick wool garment such as a coat, a darn can sometimes be concealed by first filling the hole with lint scraped from under the collar or other concealed place and then darning through it with untwisted silk.

Buttonhole Stitch: Cut the buttonhole straight with the thread of the material and large enough to admit the button easily. For heavy material use No. 36 or 40 thread waxing it slightly to make it smooth. To make strong buttonholes such as are used in children's clothes, both strand and overcast them before working. In fine work stranding alone is sufficient. To strand a buttonhole go around the buttonhole twice, taking a stitch at each end each time and letting the threads lie one over the other along the full length of the buttonhole. To overcast it, begin at the back of the buttonhole and work to the left around the edges putting three or four stitches on each side, each stitch $\frac{1}{16}$ in. in depth. If the buttonhole is to be both stranded and overcast, strand it first. In working it, hold the buttonhole lengthwise over the forefinger of the left hand, begin at the back of the buttonhole, bring the needle half way back through the material $\frac{1}{16}$ in. from the corner, pass the double end of the thread around the point of the needle from right to left and draw the needle through the loop. Draw the thread up with a little jerk to make a tight purl on the edge. There is an old rule that four stitches finish the end of a buttonhole—one at each corner and two between, but more stitches than this are sometimes needed. For a heavy outer garment, a bar at the back gives a desirable finish and adds to the strength. After the buttonhole is worked, make two stitches one over the other across each end of the buttonhole and $\frac{1}{16}$ in. from the end. Buttonhole over these threads from one end to the other turning the purl edge away from the buttonhole. A tailor's buttonhole is slightly rounded out with the scissors at the front end and is worked there with very closely placed stitches. A buttonhole is slightly smaller after working.



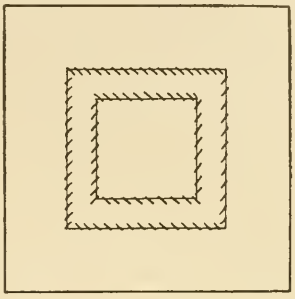
Buttonholed Loops: These are used for hooks in place of metal eyes and with buttons in place of buttonholes. They may be made directly on the fabric or on its edge. Decide upon the length of the loop necessary for the hook or button and on its place on the garment. Fasten the thread securely at one end of this position and take three or four stitches, one over the other, to the other end, leaving the threads loose for the hook or button. Buttonhole over these stitches from one end to the other and fasten securely at each end of the loop.

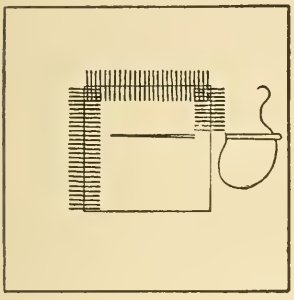
Eyelets: An eyelet is a hole pierced through the fabric and usually overhanded with close, fine, shallow stitches. It is sometimes buttonholed. For added strength, the hole that is overcast is sometimes outlined first with running stitches. In buttonholing, the eyelet is most sightly when the purl is turned away from the hole. The gauged stiletto will insure eyelets of uniform size. To finish an overcast eyelet perfectly, leave the last three stitches loose, run the needle back under them, draw down the stitches tight and cut off the thread close. For very large eyelets it may be necessary to cut away some of the material



before working. Eyelets are used for running tapes and ribbons, or for studs or buttons that are put on with split rings on the under side. They are also used in embroidery.

Patching: Darning and Patching are the two chief processes of mending. Darning has already been described. Neither a darn nor a patch is complete until it has been carefully pressed on the wrong side. There are several ways of patching, the method depending upon the material being mended, the shape and size of the worn place, and the strain that it is to have. If possible, use a piece of the old material for the patch or, if that is not possible, a piece of material that is lighter in weight than the original fabric. A patch that is heavier than the cloth upon which it is applied will tear the cloth. If the article to be patched has been washed, wash any new cloth before using it for a patch upon it. If the material to be patched has faded, fade the piece that is to be applied in the sun or in Javelle water. Some careful persons always save pieces of colored wash dresses and have them washed with the dress whenever it is laundered. In mending very fine material like fine cambric, lawn, or organdy, a piece of wash net is the best patch because it is inconspicuous but it must be darned in. Tape of various widths is a convenience for the workbasket. With its two selvages it makes an excellent patch for a straight tear. In mending woven underwear use a patch from an old garment of the same kind or from a balbriggan stocking. It sometimes pays to buy a cheap pair of stockings for this purpose. *It is important that the patch always run the way of the goods and the way of the nap.* In applying a patch to figured goods match the figures.





There are several ways of applying patches—hemming, darning, and overhanding. Hemming is the simplest. First measure the size not only of the actual hole but also of the worn material around it. Cut the patch the shape of the space measured and ½ in. larger all around. Turn in the edges of the patch over the right side ¼ in. deep all around. Trim the edges of the hole and make it a symmetrical shape—square, oblong, oval, or round. Oval and round patches are not very desirable. Baste the patch right side up on the under side of the piece being mended, covering not only the hole but the threadbare material around it. Hem down the outside and inside edges of the patch with very fine stitches using a fine needle and fine thread. Number 100 is not too fine for most patches. If the patch is to be darned on the mended piece, do not turn in the edges of the patch or hole but darn them down, catching in all ravellings. Number 200 thread is not too fine for beautiful work on cotton cloth of average weight. Never use coarser

than 100 for this purpose. There is still another way to apply a patch. When it is desirable to have it invisible, overcast it on. Cut out the threadbare material all around the hole in oblong or square shape. A square is simpler. First indicate the center of both hole and patch by creases or basted lines in such a way that the center of the hole and of the patch will be known by the crossing of the lines. Make a diagonal snip at each corner of the opening. Turn back the four sides on the wrong side and baste with fine thread. Cut the patch ½ in. larger than the hole is now. Turn down the edges of the patch ¼ in. all around. Insert the patch from the right side and catch the corners of it to the corners of the opening. If the space is large catch the edge of patch and opening together temporarily along the sides. Then overhand the two together on the wrong side with very fine needle and thread and tiny closely placed stitches. Overcast the raw edges of the wrong side with fine stitches.

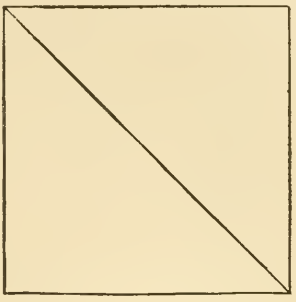
Damask Patch: Still another patch is called the damask patch and is used for table linen and other fabrics where both right and wrong sides must show. Cut the hole square. Cut the patch the exact size of the hole. Baste the piece to be patched on a firm paper keeping all the sides of the hole perfectly straight. Insert the patch inside the hole and baste it there crosswise and lengthwise through the middle with very fine thread. Darn the edges together, running the stitches deep enough into the cloth on both sides to prevent raveling. Change the order at each turn so that first the edge of the goods, and then the edge of the patch is covered. This work must be done in tiny, very closely placed stitches with very fine needle and thread.

Sewing on Tapes: A flat tape loop is more easily picked up than a standing loop. Cut the tape the required length (2 in.), turn down the ends ¼ in., and overcast to the piece wanting it with the upper side of the tape on a line with the top edge of the piece the turned down ends next the material. To conceal these ends make a line of stitching across the tape ¼ in. from the overcasting. For a standing loop, cut a three-inch strip of tape. Fold it in the middle and spread the ends apart so that the inside edges will meet each other at the ends. Turn up the ends ¼ in. and overcast to the piece ⅜ in. below the edge. Make a line of stitching ¼ in. above the overcasting to hide the turned down ends. For tying strings, cut the tapes the required length, hem both ends of each piece, and overhand a piece to each side of the garment.

Sewing on Buttons: The buttonholes are made first. Lap the buttonhole side over the button side, and pin the two together catching top and bottom edges even. To mark the places for the buttons, run a pin down through the outer end of each buttonhole and through the material under it. This leaves a pin where each button is to be sewed. For buttons with holes, make a knot in a long doubled thread and run the needle downward from the right side so that the knot will be under the button. Bring the thread up through one of the eyes of the button, lay a pin across the top of the button (this is done to keep the stitches loose), put the needle down through the eye opposite to the one through which it came up and draw the thread

down over the pin. Repeat, using opposite holes until the button is firm—about five such stitches through each two eyes. Bring up the thread underneath the button, remove the pin, and wind the thread four or five times around the threads there. Fasten off the thread under the button and cut it off.

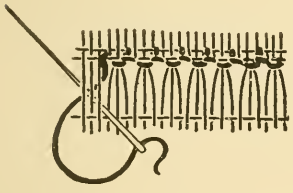
Hooks and Eyes: Sew hooks and eyes upon a double thickness of cloth or upon a fly so that the stitches will not show on the right side. Hooks are sewed on the under side of the right-hand lap; eyes, on the upper side or on the under side of the double edge of the left-hand hem or facing. In sewing on hooks, overhand through the eyes and cloth until they are firm and finish by putting several stitches across the upper part of the hook under the bend or hump. Eyes or peets are overhanded on through the circles.



Cutting Biases: A true bias is the line between two opposite corners of a square. The edge of a bias must run diagonally across the warp and woof. A bias is used where elasticity is needed, especially in the binding of curved edges. Bias bands are used for trimmings.

Gussets: A gusset is used where a seam is opened or a slash is made for a placket hole as in a petticoat, drawers, etc. Cut a 1½ in. square of the same material as the garment, turn the edges down all around ¼ in., and lay two opposite corners together. Catch the double point opposite the long side to the bottom of the slit and overhand the straight sides to the hemmed edges of the slit.

Fancy Stitches: Hemstitching. Hemstitching is done with ordinary sewing cotton. Determine the width needed for the hem and draw a thread along each side of the goods to indicate the line along which the sewing would naturally be done. The number of threads drawn depends upon the texture of the material and also upon the width of the hem and the purpose of the finished piece. A handkerchief will need fewer threads than a towel. Unless there is to be a double row of hemstitching, one at each edge of the drawn threads, care must be taken not to draw too many or the one at the upper unsewn edge will loosen when the piece is washed. Hemstitching is the basis of drawn work. Turn the hem as in hemming with the edge along the first drawn thread and baste closely with fine thread. Before taking each stitch, the needle passes under a group of threads—from three to five—and a hemming stitch is taken, the work being done on the wrong side. Pass the needle and thread under a group of threads—from three to five—then throw the thread back over the same group and take a hemming stitch up through the hem. Draw the threads down with a little jerk to make a tight purl. In hemstitching on heavy fabrics, catch the fold of the hem with a thread on the right side of the goods.



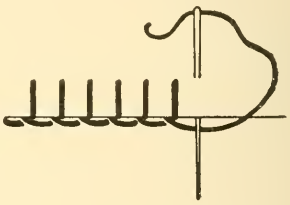
Catch Stitch: This is used on the wrong side of an open seam to hold the edges flat. The work is done from right to left with short running stitches taken alternately from side to side of the seam and in such a manner that a series of open V's is made on the sewing side and two parallel lines of running stitches on the right side of the work. The running stitches should be $\frac{3}{8}$ in. apart.

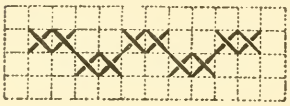
Herring-bone Stitch: On one side, this is the same as catch stitching, but worked from left to right the threads cross on the sewing side and form a series of X's. It is used for the same purpose as catch stitching to finish hems and also as an ornament on the right side of the work.

Chain Stitch: Hold the work over the forefinger of the left hand, right side up. Bring the thread up and forward and hold it with the thumb. Put the needle back through the hole that it came up, take a short running stitch towards you, and draw the thread tight making a loop.

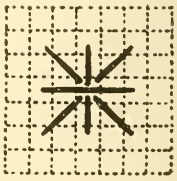
Feather Stitch: This is a variation of the chain stitch, the stitches being taken alternately to the right and left of the thread that is held by the thumb, instead of back into the hole that it came through. This stitch is used for ornamental finishes.

Blanket Stitch: This is a chain stitch which is worked from left to right over an edge instead of lengthwise along a fabric. Hold the material with the edge towards you over the forefinger of the left hand. Hold the thread with the thumb as in a chain stitch, but with each stitch put the needle $\frac{1}{8}$ in. or less to the right, drawing the thread over the edge. This is used to prevent the fraying of raw edges.





Cross Stitch: This is an ornamental stitch used in single rows but oftener to fill a design or fill the ground work of a pattern. When worked on close material such as linen, Penelope canvas is usually basted over the place to be embroidered and the work is done on this in order to have stitches even. When it is finished, the threads of the canvas are drawn out.



Star Stitch: This is an elaboration of cross stitch. It is usually done on an open canvas such as Penelope or Java.

THINGS TO BE MADE

With each model refer to descriptions of stitches and for general directions.

Sewing Bag: This model teaches running, overcasting, and hemming. Materials: Checked gingham, burlap, coarse crash, etc., for the smaller girls; chintz, cretonne, etc. for the older girls. Tear off all selvages to avoid uneven shrinking. Cut the bags in about the proportion of 16 by 6 in., planning materials of the various widths so that there shall be no waste. Double the fabric crosswise and baste the sides together ½ in. from the edge leaving them open 1½ in. from the top. Run the seams ¼ in. from the edge or, if the older girls have already learned to sew, for greater strength, use the more difficult combination stitch or French seam. Overcast the raw edges closely. Open the seam at each side and make a narrow hem at each of the four open top edges. Make a ½ in. hem across the two open tops with a ¼ in. turnover. Cut 2 pieces of tape each 1 in. longer than the distance around the top. Run both tapes through the hems of both sides and lap their ends neatly. Draw up the tapes from opposite sides of the bag. Experienced sewers may make the hem wider and make a row of running stitches ⅜ in. above the hem to hold the draw strings. This leaves a little frill at the top.

Apron: This model teaches hemming, gathering, and putting band on gathers. Materials: Checked gingham, crossbar lawn, etc. Cut the apron in the proportion of 16 in. by about 12 in. long. Let the children help in the measuring and planning for each other. Proportion the hem to the size of the apron. Turn ½ in. hems at the sides and from 1 to 2 in. at the bottom. Notch the center of the apron and gather twice across the top, the first row ¼ in. from the edge and the second ½ in. below that. For the band cut a ½ in. strip lengthwise of the material. It should be 3 in. larger than the waist of the child. Turn over ¼ in. on each side and 1 in. from each end. Mark center of belt and catch it to the center of the apron on the right side. Fasten the belt around the waist of the child and tack the band to each edge of the apron, drawing up the gathers and adjusting the fullness to fit the child. Put a pin at each side of the gathers and wind the gathering threads around the pin to prevent them from slipping. The apron now lies flat on the band. Baste the belt and apron together and sew with combination stitch. Hem down the band on the wrong side, being careful to have centers opposite each other. Overcast open edges and ends of band together. Fasten with button and buttonhole.

Sweeping Outfit: Apron with Strapped Bib and Pocket, Dusting Cap, and Half Sleeves. This is a model for girls of 12 or over. The measurements given are 12-year size. Materials: Gingham, percale, crossbar lawn, etc.

Skirt: Cut 23 in. long by 24 in. wide. This allows for 3 in. hem at the bottom and ½ in. hems at the sides.

Bib: Cut 10 in. deep by 7 wide. This allows for 1½ in. hem at top.

Pocket: Cut 8 in. long by 7 wide. This allows for 1 in. hem at top.

Belt: Cut two 2¼ in. strips 3 in. longer than the child's waist measure.

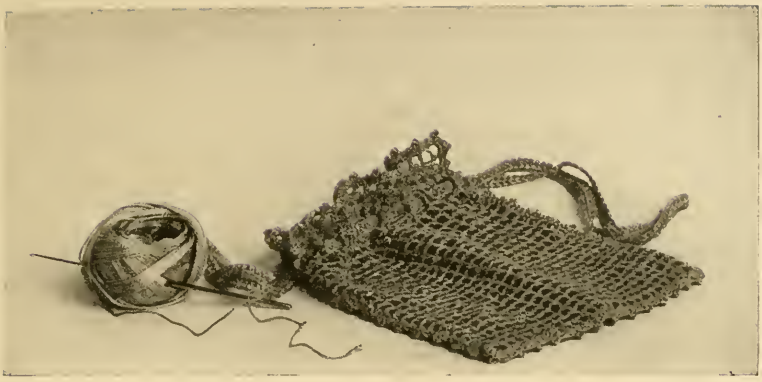
Straps: Cut two 4 in. strips long enough to go over the shoulder and join to belt at front and back. They may go straight or cross; if the latter, they will need to be a little longer.

Make the skirt of the apron and gather and baste to one strip of the belt. Hem the pocket at top, make a narrow turn at each side and the bottom and baste on right side of the skirt midway between bottom and top. Hem it down around the three sides fastening the top corners securely. Turn over ¼ in. on each side of the two straps and turn in one end of each. Fold each strap through the center lengthwise and at the unfinished end of each insert the side of the bib running the strap to the bib on the right side and hemming it down on the wrong side. Overhand the sides and ends of each strap. Join the center of the bib to the center of the belt attached to the skirt and baste the bib to the belt. Make ¼ in. turn all around on the two belt strips. Use second strip for a belt facing, hemming it firmly across skirt and bib and overhanding the rest. Fasten with button and buttonhole. Put a button on the end of each strap and a vertical buttonhole in the belt where the strap will meet it.

Dusting Cap: Material same as apron. Cut a round piece 20 in. diameter and make ¼ in. hem taking pains not to stretch the curved edge. Baste a strip of ½ in. tape 1¾ in. from the edge all around for a drawstring casing—a narrow opening should be left between the two ends to admit of the strings for tying. Run this tape on with close stitches. Thread the casing with bobbin or very narrow tape.

Half Sleeves: Same material as apron and cap. Dimensions for paper pattern: Distance between wrist and elbow plus ¾ in. hem at top and 1 in. hem at wrist. Width at top size of arm just below elbow plus ¾ to 1 in. for French seam. Width at wrist size around closed hand plus seams. Sew up with French seam and hem at bottom and top. Make a slit on the right side of each hem and buttonhole them and run in bobbin or narrow tape drawstrings.

Dusting Cloth: This teaches running, hemming or catch stitching. Material: cheesecloth. Cut square with width of cloth. Turn ½ in. hem on 3 sides. Fold first turn all around and then the second and baste.



CHAPTER V

CROCHETING

Crocheting is a kind of lace work made with a hook and with thread, cord, or yarn which may be cotton, wool, or silk. Crocheting is in reality a series of loops used in various combinations to produce different patterns. The size of hook and thread must always agree. Leaflets and pamphlets with pictures and directions for making all kinds of models are abundant at the smallest prices in the shops. Crochet hooks may be of steel, bone, celluloid, ivory, or pearl. Steel is oftenest used for thread; and bone, for cord and yarn.

A beginner in crocheting, should learn, before trying to copy a model, to handle the hook and to make the various simple stitches, beginning with the chain. After learning to handle the hook and to manage it easily, the work is simple. Hold the hook, hook part always downward, as you would a pen or pencil. The left hand holds the thread. This must be done in a certain way to keep the tension even. Wind the thread once around the base of the little finger, under the third and second fingers, between the second and first and over the first joint of the first. Pick up the thread with the hook from this first joint of the forefinger, at every stitch.

The chain is the foundation of all crocheting. (Model 1.) Knot a loop near the end of the thread. Put the hook through the loop and draw a loop of the long end of the thread back through the first loop.

Single or Slip Stitch: (Model 2.) Make a chain of the needed length according to directions. Turn the work and draw a loop of the thread through the first loop of the chain and also through the stitch on the needle.

Double Crochet: (Model 3.) This is the same as a slip stitch except that the thread is first drawn up through the stitch of the chain and then the thread is put over the needle and drawn through the two stitches on the needle.

Treble Crochet: (Model 4.) For the first stitch, chain two before putting the thread over the needle, down into the stitch below, and drawing a loop back. There will be three stitches on the needle. Draw the hook through two of them, then through the other three. In the directions, single or slip stitch is indicated by "slst"; double crochet by "dc"; treble crochet by "tr."

To fasten the thread after it is cut off at the end of the work, draw the end through the loop remaining on the needle and pull down tight. Then thread the thread into a needle and sew it down with little invisible stitches and cut short.

For a doll's set comprising bib, cap and shoes, have two spools of No. 8 cotton, one white and one baby pink or blue. Hooks are numbered differently by different manufacturers. An English hook should be No. 6.

After making the pieces according to direction for the doll, it will be an easy matter to increase the number of stitches and make them large enough for a child. Baby ribbon the color of the thread will be wanted for all.

Doll's Bib: (Model 5.) This begins at the bottom. Make a chain of 25 and work back on this chain 1 tr. in the 4th ch. * Ch. 1, skip 1 ch., 2 tr. in the next 2 ch. Repeat from * to end of row.

2nd row—Ch. 3, turn, 1 tr. in first dc. * Ch. 1, 2 tr. over next first ch. of previous row. Continue from * to end of row. Finish with 1 ch. and 2 tr. in loop stitch at end of row below.

Work 12 more rows like the second row. There will be an increase of 2 tr. (1 pair) on each row. This will end the body part of the bib. The sides are crocheted separately. To make the bib shapely, follow the directions carefully.

15th row: Ch. 3, turn, 1 tr. in last tr. of previous row, ch. 1, 2 tr. over 1st ch. Make 5 more pairs of tr. with 1 ch. between—7 in all.

16th row: Turn, 1 tr. over first ch. Make 5 more pairs of tr. with 1 ch. between. At end of row, 2 tr. in last tr. of row below.

Repeat alternately the 15th and 16th rows 3 times, having 8 rows in all.

23rd row—Ch. 4, turn, 2 tr. over the next ch. Repeat 1 ch. and 2 tr. 4 times. Ch. 1, 1 tr. in 3rd ch. of previous row.

24th row—Ch. 3, turn, 1 tr. over next ch. Repeat 1 ch., 2 tr. 5 times.

Repeat the 23rd and 24th rows alternately 3 times, making 8 rows more. Cut the thread and draw the end through the last loop to fasten it.

For the other side, count off the spaces and stitches, and follow the same directions.

Crochet the last row with colored thread. Thread ribbon through the row of beading at the back and the two rows of beading at the front and sew on ribbon tie ends long enough to make a good bow at the throat.

Doll's Cap: (Model 6.) Make chain of 5 stitches and form into a ring with 1 slst. in first loop. This is the front of the bonnet.

1st row: Ch. 3 and make 20 tr. over the ring of 5 ch. Close with 1 slst.

2nd row: Ch 4, 1 tr. on top of next tr. * ch. 1, 1 tr. in next tr. Continue from * to end of row and join.

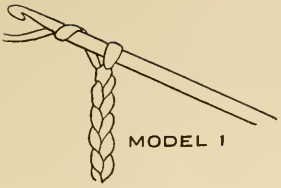
3rd row: Ch. 4, * 1 tr. over next ch., 1 ch., 1 tr. over next tr., ch. 1. Repeat from * to end of row and join.

4th row: Ch. 5, 1 tr. over next ch. * 2 ch., 1 tr. over next ch. Repeat from * to end of row and join.

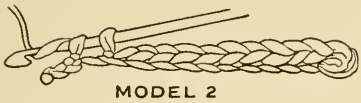
5th row: Work exactly like the 4th row.

6th row: Ch. 3, 2 tr. over next 2 ch. * 3 tr. over following space of 2 ch. Repeat from * all around cap and join.

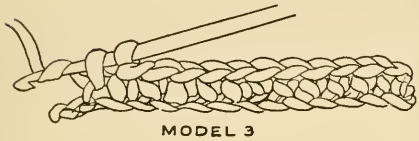
7th row: * Ch. 4, skip 2 tr. of previous row, make 1 dc. in the 3rd tr. Repeat from * to end of row.



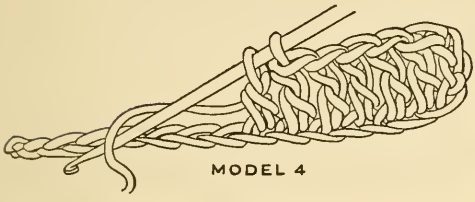
MODEL 1



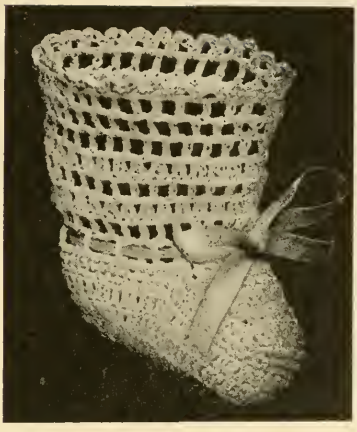
MODEL 2



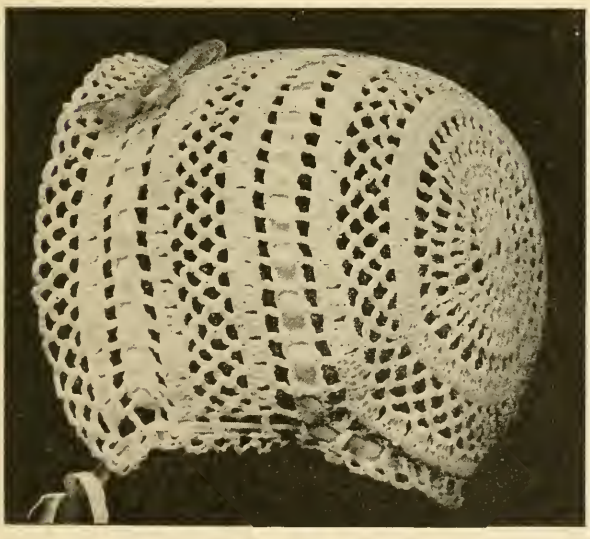
MODEL 3



MODEL 4



MODEL 7



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MODEL 6

8th row: * Ch. 4, 1 dc. in center of next ch. row of 4 ch. Repeat from * all around.

9th, 10th, and 11th rows: The same as 8th row.

12th row: Ch. 3, 3 tr. over next 4 ch. of previous row. * 4 tr. over next 4 ch. Repeat from * to end of row and join.

13th row: Ch. 5. * Skip 2 tr. of previous row, make 1 tr. in 3rd. Ch. 2 and repeat from * to end of row and join.

14th row: Ch. 5. * 1 tr. on top of next tr., ch. 2. Repeat from * until there are 12 squares left, then ch. 5 and turn the work.

15th row: Going back, work the 14th row from * to beginning of 14th row. Turn.

16th row: Ch. 3, 2 tr. over next 2 ch. * 3 tr. over second ch. Repeat from * to end of row.

17th to 20th row: Work the same as from 7th to 11th row.

21st row: Is to be worked like the 12th row. Next make the rows from 13 to 16 over again.

Now chain 5 and work around the neck part, 2 ch. and 1 tr. catch, over each next space. When the next row is finished, work the front without breaking the thread, 3 ch., skip 2 tr., 1 dc. in 3rd tr. Repeat this alternately for 3 rows on front and once around neck.

The last row may be worked with a colored thread, pink or blue. Baby ribbon may finish it.

Doll's Shoes: (Model 7.) These may be made of silk, wool, or cotton but cotton will be most practical for a class of children.

Ch. 63 and close in a ring with 1 slst. in the first stitch. This is for the top of the shoe.

1st row: Ch. 4, skip 1 ch. and make 1 tr. in the 2nd ch. * Ch. 1, skip 1 and make 1 tr. in 2nd ch. Repeat from * all around and close with 1 sc.

2nd row: Ch. 4, * skip 1 tr. of previous row, 1 tr. over next 1st ch., ch. 1, repeat from * all around and join.

3rd row: Ch. 3, 1 tr. in the 2nd space of 1 ch., then continue as in 2nd row with 1 ch. and 1 tr. over 1 ch. alternately. Finish with 1 tr., skip the last ch. space and slip on the 3rd stitch of the 3 ch. that began this row.

4th row: Ch. 3, 1 tr. over next 1st ch. Continue to end of row, until 1 space of 1 ch. is left with 2 tr. in each 1 ch. Slip the last tr. to the 3rd ch. of beginning.

Now work one more row like 3rd row, 1 more row like 4th row, and 2 more rows like 3rd row.

If white thread has been used for the top it will be well to introduce a color—pink or blue—for the ankle and foot. Cut off the thread, thread it into a needle, and fasten it with tiny stitches.

1st row: Loop the new thread into a stitch, count 8 spaces from it (this is for the ankle), catch into the 9th space, ch. 3 and then make 2 tr. in each of the next 9 spaces.

2nd row: Ch. 4, turn, skip 1 tr. and make 1 tr. in 2nd tr. Ch. 1 and repeat to end of row.

Work the 3rd and 5th rows like the 1st row and the 4th row like the 2nd.

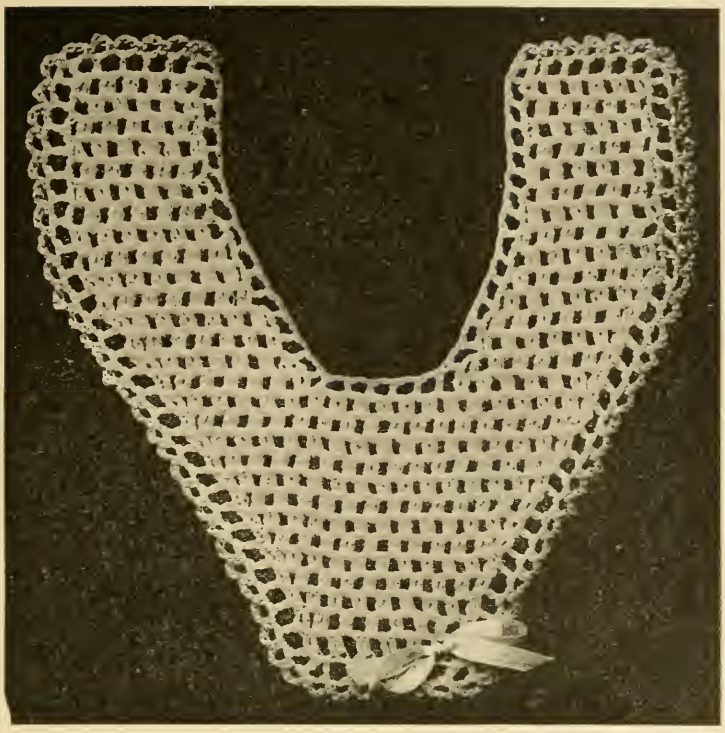
To make the sole, ch. 1, turn to side of ankle and work 2 dc. in each space; where the ankle begins, skip on both sides 1 to 2 spaces, according to the foot of the doll.

Work two more rows like the one just described. When the last dc. is joined, ch. 3 and make 3 tr. rows all around. For the last row make tr. in every other tr. of previous row. Cut the thread, leaving an end long enough to use in sewing the shoe together on the bottom.

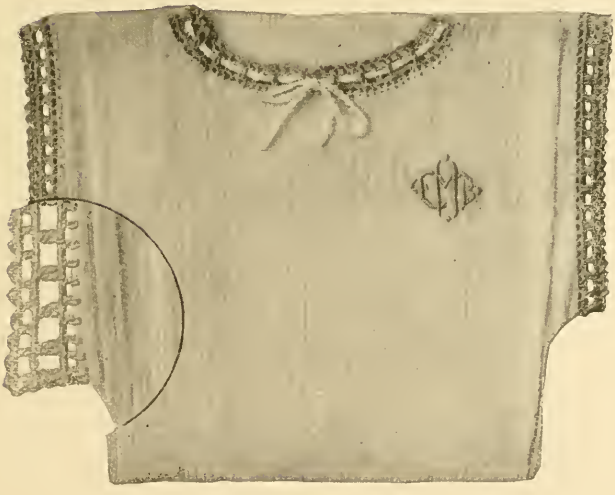
For the top finish, use the same color as that in the ankle and foot part. Loop the thread with a stitch for the top row, * chain 4, 1 dc. in next space, ch. 4, repeat from * to end of row and join. Cut the thread and fasten with stitches that do not show.

Crocheted Edge: (Model 8.) This may be done with white or colored cotton. It makes an excellent finish for necks and sleeves of underwear and dresses for little girls or their dolls. First make the narrowest possible hem.

1st row: With the crochet hook, draw a loop of the thread through the fabric just at the base of the hem. Ch. 4, skip a space the length of 1 chain about ¼ in., make 1 dc., ch. 1, 1 dc., and so to end of hem.



MODEL 5



MODEL 8

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2nd row: Ch. 3, 1 tr. in first ch. space, ch. 2, skip 1 ch. space, 2 tr. in 2nd ch. space. Continue to end.

3rd row: Ch. 3, 1 dc. between 2 tr., ch. 2, 1 dc. in next ch. space. Continue to end.

4th row: Ch. 4, 1 sc. in 1st space, 1 sc. in next stitch, ch. 4, in sc., and so to end. These loops are called picots.

CHAPTER VI

KNITTING

Knitting is done with thread or yarn of cotton, wool, silk, or linen and with steel, celluloid, bone, or wood needles. Steel needles are used for all but the coarsest knitting. Flat pieces such as wash cloths, belts, etc., are knit with two needles. Round pieces such as stockings, mittens, etc., with four or five needles. Americans generally use four; Europeans use five. The result is the same. Whatever the number of needles, each needle in turn is used in the right hand to pick up, knit, and transfer to itself, one by one, the stitches from the left hand needle. At the beginning, all the stitches are on the left hand needle; at the end, they are on the other.

For a little girl who is learning to knit, it is best to use cotton or wool yarn of medium weight with needles that suit it in size. The work should be set up for her and two or three rows knit. Pamphlets with full directions and copious illustrations of the different stitches and of models of all kinds may be bought in the shops at small cost.

For evenness and good tension, it is necessary to hold the yarn or thread right. Wind it once around the little finger of the right hand, pass it under the third and second fingers and over the first joint of the forefinger. The forefinger throws the thread over the right hand needle at every stitch.

There are several ways to cast on stitches but the best way is with one needle, knitting them on to make a firm edge. Allow a length of thread long enough for all the stitches, make a loop, and slip it on the needle. Hold the thread that comes from the ball in the right hand as described. Pick

up the other thread in the left hand, passing it under the three fingers, over the thumb and under the forefinger. Use the forefinger like a hook to hook the loop that is on the thumb off the thumb and over on this forefinger. Now pick up the nearest thread of this loop on the forefinger with the needle, throw the right hand thread under the point and over the needle and draw it through, making the second stitch on the needle. If two needles are used, cast the stitches on one needle; if four or five needles are used, cast all the stitches on one needle and the next time around knit them off on three or four needles according to the number used, dividing the stitches evenly among them. Leave one needle empty for knitting.

Plain Stitch: (Model 1.) All the stitches are on the left hand needle. The thread is back of the needles. Slip the right hand needle from left to right under the front thread of the first stitch, throw the thread around the point of the right hand needle from left to right, draw the new loop through the old stitch, and slip the old stitch off the left hand needle.

Garter Stitch: Two needles are used and the plain stitch is knit back and forth row after row, resulting in alternate rows of plain and purl.

Purl or Seam Stitch: (Model 2.) Throw the thread in front of the needles. Pass the right hand needle from right to left under the front thread of the first stitch on the left hand needle, throw the thread around the point of the right hand needle from right to left and draw it through, slipping the old stitch off the left hand needle.

To Widen or Increase the Number of Stitches: (Model 3.) Knit the front thread of the stitch, leaving the old stitch on the left hand needle. Then knit the back thread of the same stitch. This makes two stitches where there was one. It leaves no hole.

To Narrow or Decrease the Number of Stitches: Knit two stitches together like one.

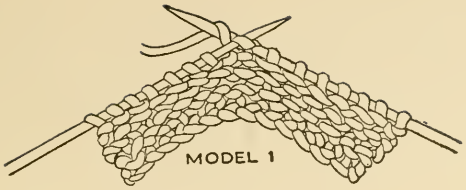
To Make a Hole for Ornamental Work: Put the thread around the needle and then pick up two stitches and knit them together like one. On the next row, knit the thread that is over the needle like a stitch.

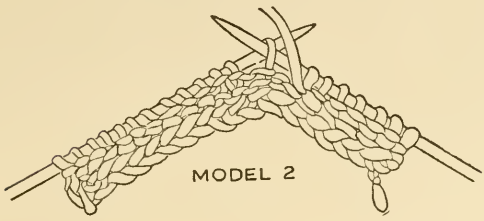
To Bind off Stitches at the End of a Piece: (Model 4.) Knit the stitches one by one and slip the right hand one over the new stitch continuously.

In the descriptions given abbreviations are as follows: Plain Stitch, k; Purl or Seam, p; Widen, w; Narrow, n; Hole, h.

Child's Wristlets: Use colored wool for the body part and white for the stripes. The number of stitches used will depend upon the kind of wool and the size of wrist to be fitted. Cast enough stitches on one needle that shoved close together will make a string long enough to go tight around the wrist. Then k 1, p 1, alternately. When finished there will be alternate vertical rows of plain and purl stitch. Introduce white stripes about half an inch from top and bottom. Make them 3 rows wide and 6 rows apart. When the band of knitting is as long as the wristlets are to be deep, bind off and sew up. These wristlets may be knit round from the start by using 4 needles.

Baby's Scarf or Wrap with Cuffs: (Model 5.) Materials, Shetland floss and steel needles No. 10 and bone needles No. 4.


MODEL 1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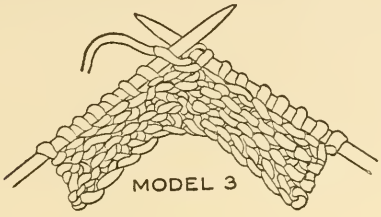
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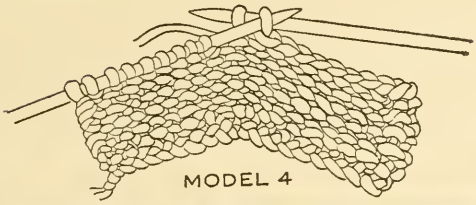
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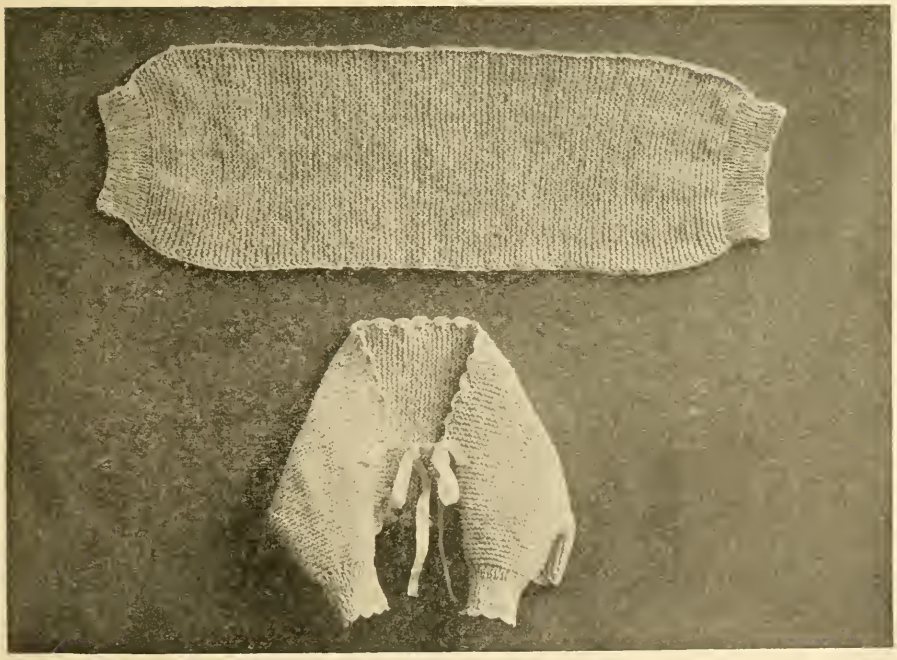
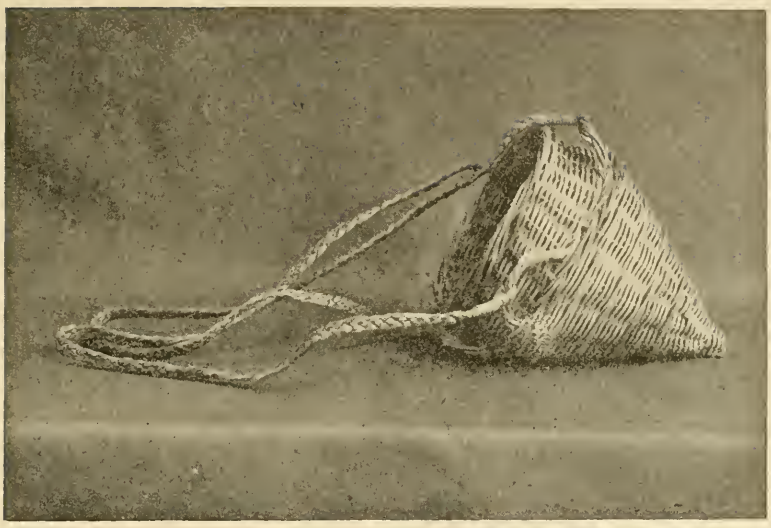


Cast 44 stitches on one of the steel needles. K 1, P 1 for a depth of 1½ in. Knit the stitches off on a bone needle and knit garter stitch with the bone needles until there is a length of 22 inches. Knit off on steel needles for the cuff and make like the first. The entire length from edge to edge is 25 inches. The cuffs are 5 in. around. The depth at the back is 8 in. Sew up the cuffs and crochet scallop around scarf and edges of cuffs. For the Scallop: slst, 1 ch., 1 tr., 1 ch., 1 tr., 1 ch., 1 tr., 1 ch., 1 slst. Skip 1 rib between each two scallops. Measure 5½ in. from top of cuffs and sew on tie ribbons.

To make a scarf for an adult, set up 60 stitches on a steel needle. Knit as directed. When the cuff is deep enough widen every other stitch, making 90 in all, knitting them on one of the bone needles.

To make a scarf for a little girl, cast on 50 stitches. The scarf will be 9 or 10 in. wide. Germantown wool may be used. These scarfs make excellent gifts for babies' hospitals and for destitute children.



CHAPTER VII

BASKETS

No basket is a good basket which is not suited in size, shape, and strength to the use for which it was made. An honest basket is like an honest person. It is true to its purpose in character and it is as strong and reliable as it looks.

Before beginning the basket lessons get together from the teachers and from friends different kinds of baskets and let the children examine them, discover their material, and decide upon their use. Let them discuss their suitability for the use for which they were made. Are they strong enough—too stout—are the handles firm—are the handles conveniently placed—does the shape fit the need or is the top too small to allow the contents to be found easily or too open to hold it in? No one will make a good basket until these things are considered wisely.

The children will be interested to know that people made baskets even before they made pottery; that, in fact, baskets were the first molds for pottery—fragments with basketry imprints in the museums prove this. Of all peoples our own American Indians have made the most wonderful baskets, in variety of materials and weaves. In the old days the Indians used them not only for holding and carrying their possessions but also for cradling their babies, mixing their food, and even for cooking. The cooking basket is so closely woven that it holds water. Red hot stones are thrown into the basket with the water and food. The cooking basket is not put over the fire. Some of the American Indian baskets are so choice and rare that they have sold for more than a thousand dollars each.

a coil and securing the last end by twisting it over and under several times. Do not allow the reed being used by the children to get on the floor under their feet.

Implements needed: Strong sharp scissors, sharp knife, awl, stiletto, or coarse knitting needle, blunt-nosed pliers. The last may be bought at Five and Ten Cent Stores. A pail or basin of water should be at hand for dipping and every child should have a wet cloth with which to keep the reed moist.

A round reed basket has two parts—the ribs and the weavers. The ribs radiate from the center of the bottom and are vertical at the sides. The weavers thread over and under the ribs producing the weave. The ribs of the bottom are called by professionals "spokes" and of the sides, "stakes." For convenience, ribs of both bottom and sides will here be called "spokes." Spokes should be at least one size coarser than the weaver. In coarse work they should be two or three sizes larger.

General Directions: Spokes should never be more than ¾ inch apart. In fine work they should be closer.

Keep the spokes from first to last at even distances apart.

Never weave with dry reed. Soak the reed in warm or cold water until it is pliable. The length of time needed for soaking depends upon the size. Coarse needs longer than fine. Number 2 will need about 5 minutes; Nos. 3 and 4, about 15 minutes. Over-soaking changes the color and makes the reed brittle and shaggy.

When a reed is to be bent at right angles to itself or back upon itself, as in a spoke finish or handle, soak it until it is very pliable, and then crush it at the point to be bent with blunt-nosed pliers. If these are not at hand, twist it at this point.

To piece weavers, cross the old and the new one back of a spoke in the inside of the basket.

To finish off a weaver, thread it through a row of weaving inside the basket.

In cutting reed, always cut slantingwise—never straight.

Trim all ends inside the basket so that each will lie just back of a spoke which will keep it from slipping.

Should a spoke break, sharpen the end of another and thread it far down into the weaving beside the broken one and then cut off the broken one close to the weaving. In inserting new spokes or threading the ends of extra spokes into the weaving, make a way for them by forcing the weaving apart with the stiletto, knitting needle, or awl.

Spoke Finish: When the basket has reached its desired size, and the weaving is finished, the spokes which are left projecting upward or outward are used to make the finish of the edge. There are many ways of doing this. Three ways are used in the models shown. For convenience these three ways will be called "Single Border," "Double Border," and "Looped Border." When the work is completed, the spokes are cut off slantingwise just beyond the spoke at the right.

Single Border: Pass each spoke in front of one at the right and into

the basket, threading the last spoke through the loop made by the first.

Double Border: This is made in two rows: Pass each spoke in turn back of one spoke, at the right and out, threading the last through the loop made by the first. Then, pass each spoke in front of two and thread it into the basket through the adjoining opening.

Looped Border: Sharpen the ends of all the spokes. Thread each in turn into the weave just beyond the second spoke at the right, pushing it down through the weave. Draw all the loops down evenly.

After a basket is finished, it may need to be dipped and then be modelled into perfect shape by the hands.

Weaving: The following weaves are introduced in the baskets illustrated: Single, Double, and Japanese.

Single Weave: One weaver with odd number of spokes. Pass the weaver over and under spoke after spoke in turn.

Double Weave: The same as single weave except that two weavers are used side by side.

Japanese Weave: One weaver and any number of spokes that is not divisible by three. Pass the weaver over two spokes and under one continuously.

In weaving a basket always hold the outside of the basket towards you.

To make a firm base for a round reed basket, bend the spokes slightly downward to make a concave bottom. When the bottom is finished, finish off the weaver turn the work over and weave from the other side.

Beginning a Basket: A round reed basket is begun at the center of the bottom, half the spokes crossing the other half at right angles. Spokes should be cut long enough to reach across the bottom, to the top of the opposite sides and to make the spoke finish of the top edge.

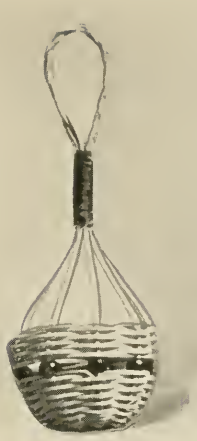
There are many ways of beginning a basket. One is used in the models given. (Model 1.) Cross half the spokes over the other half, make all ends even and for the children, tie with raffia. For the first lesson, the teacher will do well to have all the baskets started and the weaving begun. When the children begin the basket themselves for the first few times, tie the crossed spokes with raffia before beginning the weaving.

Always have a finished model for the children to see.

The following books on basketry are reliable: Mary White's two books, *How to Make Baskets* and *More Baskets and How to Make Them*, published by Doubleday, Page & Co.; and the *Basketry Book*, by Mary Blanchard, Charles Scribner's Sons.

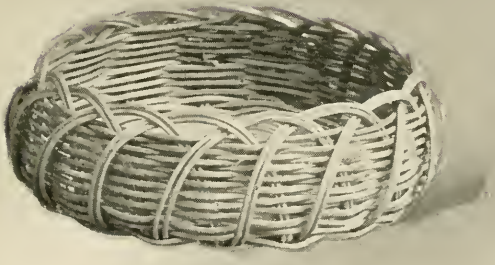
Reed may be bought at School Supply Houses such as Milton Bradley's, Fifth Avenue, New York City; J. L. Hammett, Bush Terminal, Brooklyn, N. Y.; the American Reed and Rattan Manufacturing Co., 268 Norman Ave., Brooklyn, N. Y.; the New England Reed Co., 9 Green Street, Boston.

Reed Mat: (Model 2.) No. 4 reed for spokes and No. 2 weavers. Cut 8 spokes 12 in. long and 1 spoke, 6 in. Begin as described. Catch one end of a weaver under a group of the spokes and weave over and under the groups of four three times; weave over and under the

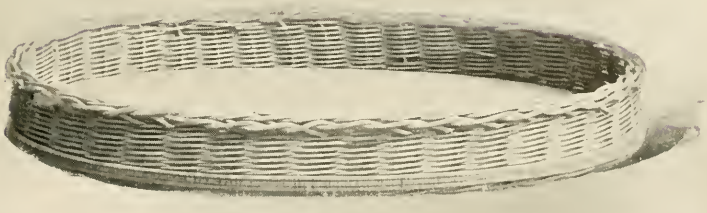


MODEL 9

MODEL 5



MODEL 6



MODEL 8

spokes in pairs three times; weave over and under the spokes singly once. Sharpen one end of the odd spoke and insert it between the last spoke of the first circuit and the first spoke of the second one. Proceed with the single weave until the mat is 6½ in. across. Finish off the weaver. See that the spokes are of equal length and sharpen all the ends. Pass each spoke across one and thread it into the weave at the side of the second spoke from it.

Little Girl's Work Basket: (Model 3.) This basket is 5½ in. across the top. No. 4 reed for spokes and No. 2 weavers. Cut 8 spokes 19 in. long and 1, 9 in. Proceed as in the reed mat (Model 2), making 16 rows of single weave and bending the spokes down slightly. This makes a concave bottom and a firm base. Finish off the weaver. Turn the work over, insert a new weaver, and bend the spokes upward slowly for 16 rows. Then bend them straight up for 10 rows. Finish off the weaver. Finish with the double border.

The Handle: Cut 3 No. 4 reeds 16½ in. long. Sharpen both ends of all. Thread one of these through the weaving on opposite sides under the spoke finish to the bottom. Thread the others one by one through the same spaces, twisting each around the first 4 times. Cut 2 strands of No. 2, 25 in. long. Thread 1 strand through the basket from the inside out and each side the handle under the spoke finish. Twine it around the handle following the other coil. Insert the other strand at the opposite side and repeat. Then bring the ends across the handle at each side in an x— (see basket).

Side Handle Basket: (Model 4.) Number 4 spokes and No. 2 weavers. Cut 8 spokes 19 in. and 1, 9 in. Begin as before. Make 16 rows of single weave. Turn the work over as before. Bend the spokes directly up and make 10 rows of single weave; 6 rows of double weave; 7 rows single weave. Finish with a single border. Handles: Cut 2 pieces No. 4, 6 in. long. Sharpen all the ends and insert each side, leaving 3 spaces of weaving between each two ends. Loop a No. 2 reed around one end of each and twine back and forth around the No. 4, threading the No. 2 into the weaving at the top at each turn. This makes the handle firm.

Handled Cake Tray: (Model 5.) No. 4 spokes and No. 2 weavers. The bottom of this basket is 8 in. across; the sides are 1½ in. deep including the loop finish. In the two preceding models there have been 16 spokes. This basket requires twice as many. For this reason, additional spokes are introduced near the edge of the bottom. Cut 8 spokes 18 in. long and 17, 9 in. Sharpen one end of each of the short ones. Begin as before with the long spokes, introducing one of the short spokes. Make 15 rows of single weaving; 4 rows, double weave; insert one of the short spokes at one side each of the original ones and push it down through the first row of single weaving. Cut off the original odd spoke and push the others around even. Make 7 rows Japanese weave; 4 rows, double weave; 2 rows single weave.

To keep this bottom from warping, fasten 6 straps of narrow tape across it and thumb tack them an inch from the edge to a small board. These straps must not conflict with the spokes. Then turn the spokes up sharply, after a thorough soaking with a cloth or sponge, and make 10 rows of single weave. Finish with the loop border.

The Handle: Cut 2 No. 4 reeds 19½ in. long, sharpen all the ends and thread them through the weaving at opposite sides, winding them around each other three times and making the two strands at each side six spaces apart. Thread a No. 3 weaver through the weaving from inside out and wind around the No. 4 pieces, making each turn take an opposite direction so that it will cross, not follow, the preceding strand. Thread the ends through the weaving of sides and bottom.

Work Basket with Over Spoke Finish: (Model 6.) No. 2 spokes and No. 2 weavers. Cut 8 spokes 25 in. long and 18, 13 in. Begin as before and make 10 rows of single weave. Insert a short spoke next each of the original ones pushing it through to the first row of weaving. Using the spokes double continue with single weaving until the bottom is 6½ in. diameter. Turn the work over and make 22 rows of single weave, bending the spokes up straight at the first, then slightly in. For the spoke finish: Bring each pair of spokes in turn over one spoke, under one spoke and thread the ends through the weaving of the bottom, next the third pair of spokes.

Vase: (Model 7.) The vase shown is made over an olive bottle that is 8 in. high. But because bottles differ in size and shape directions are given for a bottle of any size. Jelly

glasses and other shapes may also be covered for flower holders. Use No. 2 reed for spokes and No. 1 for weavers. Cut the spokes long enough to cross the bottom and both sides and add 8 in. for the top spoke finish. Make the bottom 2 in. larger than that of the bottle. Bend the spokes sharply up and make 12 rows of single weave. Bend them in towards the bottle until they are near its sides and weave to the top. The Spoke Finish: Bring each spoke under 2 and out and thread it through 3 rows of weaving next the 3rd spoke.

The Handle: Cut two No. 2 reeds 44 in. long and sharpen all the ends. Thread one of these from the bottom row of weaving through the inside and out above the 15th row, leaving 7 in. hanging from the bottom row on each side. Thread the other strand through 1¾ in. from the first, twine it around the first twelve times, and bring it out on the other side like the first. Bring the end of each strand at each side up, twine it around the lower part of the split handle and loop it around as shown.

The Tray: (Model 8.) This tray has a wooden bottom 15½ in. long and 10 in. wide. A seasoned board should be used. One of several layers such as is made for pyrography is best. A tray of any size oval or round may be used with the directions that follow. No. 4 reed for spokes and No. 2, weavers. Punch an odd number of holes in the board $\frac{3}{16}$ in. from the edge and ¾ in. apart, making them just large enough to admit the coarse reed. Cut as many 10 in. spokes as there are holes. Thread the spokes through the holes allowing each to project 2½ in. on the under side. Fasten the spokes so that they will not slip by bringing each of the under side ends over the one at the right and threading the last through the loop made by the first. The ends will project towards the center. Turn the board over, pull the spokes into shape, and make 20 rows of single weaving. Finish with the double spoke border.

Rattle: (Model 9.) No. 1 reed for spokes and weavers. Cut 8 spokes 11 in. long and 1, 6 in. Cross 4 over 4 and weave over and under groups of 4 with raffia 4 times. Draw all the ends even. With the raffia make 6 rows of single weave over single spokes, introducing the short spoke after the first row. Finish off the raffia weaver. Introduce a reed weaver and make 16 rows of single weave, bending the spokes as indicated by the picture. Finish off the weaver. Sew a tiny bell in the bottom. Thread a glass bead on each spoke. Make 10 rows of single weave. Make a 3-strand braid of the spokes and cut the ends off 8 in. from the weaving. Use raffia to wind these ends very close with the base of the braid 2 in. from the last row of weaving.

Coiled and Sewed Basketry: It is in coiled and sewed basketry that native products such as grass, pine needles, corn husks, etc., are brought into use. The coils may be bound or sewed with any suitable pliable material —the amateur uses raffia because it is easily obtained and of desirable texture. With children, coarse hemp cord is practical because it is cheap, easily obtained, and it is pliable and consequently easy to handle. Coarse reed is also used. When cord or reed is employed, a stitch is used that entirely covers the coil as in Model 10. When a beautiful texture, such as grass or pine needles, is used, the stitches should be made subordinate to the material, using the kind of stitches and just enough of them to make the work firm and bring out the natural colors of the coils.

Raffia and ¼ in. hemp cord. (Model 10.) About 30 feet of cord will be wanted. Wind this in a ball. Cut off an inch from a strand of the cord at one end, thread a No. 19 raffia needle with natural raffia, and wrap this end for an inch with the raffia. Then coil the end into a close ring like the pine-needle details. (Models 10a and 10b.) Sew over and over this coil in closely placed stitches, adding a new coil and sewing over these two once around. On the third row begin the lazy squaw stitch. In each stitch the raffia wraps the new coil twice and then sews under the old and over the

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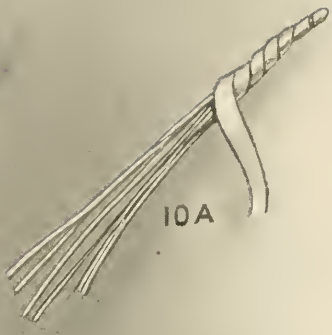

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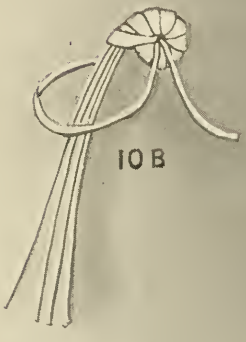

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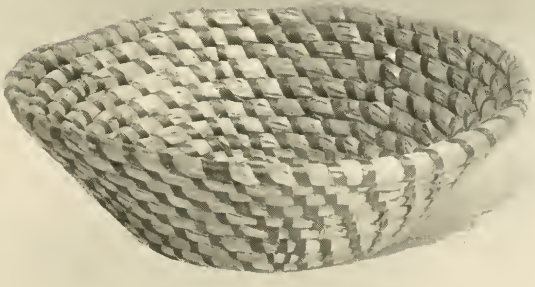

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new, binding the two together. (Model 10c.) Make a mat in this way that is 5 in. in diameter. Then begin the sides. Place each coil directly on top of the coil that preceded it instead of beside it as before. Make 3 rows. Let the new coil extend beyond the preceding coil slightly for 4 rows. Bring the new coil slightly in from the preceding one for 6 rows to make the top smaller. To finish the coil at the top, cut away the strands for several inches, one by one, so that the coil will diminish and gradually lose itself under a stitch. In Model 10, natural raffia is used for the body of the basket with brown introduced at the base and top edge and orange in broken lines below.

Pine-Needle Basket: (Model 11.) Pine needles are sold by school supply houses in pound and half-pound bundles. They average 12 inches in length and are packed as they grow, in clusters of three. Do not remove the natural binders of these clusters until they are to be used and never pull the needles apart separately. Always work with the clusters. Before beginning a basket soak the needles that will be wanted for the first few coils four or five hours or wrap them in a wet towel overnight.

Pine needles when dry are a glossy green-brown of silky texture. Do not make the mistake of hiding their beauty with fancy stitches. Use the stitch and the color for sewing that will best bring out the native colors.

Model 11 is 6 in. across the widest part; 5 in. across at the top; 2½ in. deep. It is sewed with raffia of a soft brown shade which harmonizes with the color of the pine needles. Two stitches are used, the tie stitch and the wheat stitch.

The Tie Stitch: (Model 11b.) This stitch is very firm and is used both for ornament and to give rigidity to the work. Make two stitches over the old coil and the loose strands of the new coil putting the needle from front to back each time and always through the same hole. Then put the needle over once more but this time to the left of the new stitch, across the stitch, and down through to the right of the new stitch, drawing the raffia down tight. Draw the raffia across the back of the work and start a new stitch ¼ in. from the first. In succeeding rows, put the needle between the two strands of the stitch below the new coil.

The Wheat Stitch: Bring the needle three times from back to front over the old coil and the loose strands of the new coil, putting the needle three times through the same hole. Then stretch the raffia across the front of the work (this makes the characteristic sprangle), over the upper coil, and back through to the front below the old coil. Repeat as before. On the second and succeeding rows take the new stitch each time between the two strands of the stitch directly under it. The wheat stitches should not be too close. In Model 11 they are ¾ in. apart at the bottom and 1½ in. at the top.

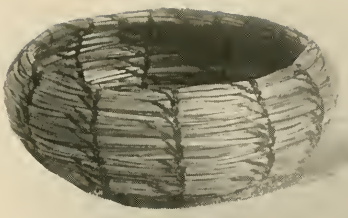
To start the basket, remove the natural binders from two clusters of needles, thread a strand into the raffia needle, and wind the two clusters together over and over at their joined ends for about an inch. (Model 10a.) Wind in a tight coil and sew over and over putting the stitches close together to cover the coils. (Model 10b.) Sew around the ring in this way, bringing

all the stitches from the center. Over the next row make 6 tie stitches and continue for 3 rows, adding more clusters to the coil until there are 5. Make a stitch between each of the 2 stitches and continue until the bottom is 3½ in. across. (Model 11a.) In splicing the coils as the pine needles diminish, push the joined end of a new cluster into the middle of the coil hiding the end. To make the sides, put the coils directly over each other for 4 rows instead of beside each other as before. Use the wheat stitch; then let the coils project slightly to the outside for 6 rows; for 4 rows draw them towards the center making the top smaller. To finish the top, diminish the coil until the end disappears under a stitch.

Straw Basket: (Model 12.) Straw of a golden yellow is used in this basket, which after several years has lost none of its beautiful sunny color. It is sewed with brown fiber but raffia serves a similar purpose. The ray stitch is the only one used. The ray stitch is the simplest stitch of all. Sew over and over taking each new stitch in the top thread of the stitch that is under it. To do this, put the needle from back to front under the old coil, through the stitch at the right from right to left and over the new coil. Use the coils as described under the Pine-Needle Basket.

Grass and Husk: (Model 13.) This is made with grass overlaid in places with strips of beautifully colored husk from the silky layers next the ears. It is sewed with the ray stitch. Beautiful color schemes may be obtained with husks. It is possible to use the husks alone.

Easily Woven Reed Scrap Basket



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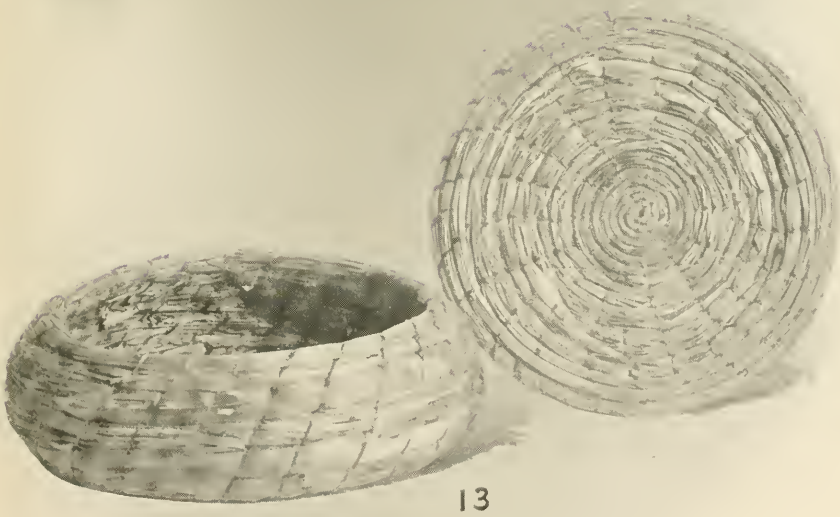

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CHAPTER VIII

CANING

(* Model 70.) Shapes of chair seats, square, oblong, round.

Materials: 3 wooden pegs which may be made by the boys in carpentry class, or wooden meat skewers; clippers or strong scissors, piece of cloth to moisten cane while working, fine or medium cane for weaving, heavy cane or "beading" for couching.

The process may be learned by using a frame like a slate frame prepared for this purpose by having holes drilled in it.

Preparation: Soak cane in tepid water about 15 minutes. Keep the cane moist with a cloth. This is especially necessary when turning the heavy cane or "beading" at corners. If the cane is too moist it will discolor and split.

To reseat a chair which has been caned by machine use this method: With a sharp knife cut away the old cane seat close to the frame. Sandpaper the edges of the frame. Drill holes in a straight line through the center of the frame, being careful that they shall be opposite each other on the parallel sides.

Beginning or First Layer: Always start in middle of sides or back and work either to right or left. Thread a strand of cane down through a hole leaving about 3 in. on the under side. Hold it firmly by inserting a wooden peg in the same hole. Stretch cane across chair to corresponding hole on opposite side. Pass down through this second hole and secure with second peg. Bring up through next hole from underneath side of chair. Stretch cane across to opposite hole and peg with third peg. Continue this process until this half of frame is covered, changing second and third pegs from place to place as work proceeds. **Do not remove first peg until end has been secured underneath,** by winding it around cane between first and second holes. Follow same directions for other half.

Joining: Carry short end of cane across the next hole underneath the chair and introduce new strand from above as at beginning, loop this over short end and up through same hole to surface, so that the two are carried as a double strand for a short distance. Secure end of original strand by

winding over cane underneath, moistening to prevent breaking when winding.

Second Layer: Repeat these directions on the remaining sides, weaving under and over the cross lines of cane.

Third Layer: Begin at hole next corner instead of middle. Use same holes as for first layer, weaving cane over second layer.

Fourth Layer: Begin at hole next corner. Use holes of second layer, weaving over and under first and third layers, being careful not to twist nor misplace the strands.

Diagonals: Begin in corner hole. Carry cane diagonally over vertical and under horizontal canes. Reverse, under vertical and over horizontal for opposite direction.

To Finish Chair: Peg piece of heavy cane into a corner hole; lay it over holes on upper surface. Fasten a piece of fine cane to the under side of the chair by winding it around cane already woven in. With this strand couch the beading on by passing it up through next hole, over beading and down through same hole, then up through next hole and so on. Turn corner carefully, having beading moist so that it shall not be broken. Finish in the starting hole, remove peg, and wind end underneath.

Raw Flax and Cotton Bolls

CHAPTER IX

WEAVING

Although weaving, because it requires close application, is not favored by educators for young children, it may be made the subject of some most entertaining and instructive talks to all the boys and girls above kindergarten age and may provide practical occupation for a few of the larger children. The girls will enjoy making rugs for their dolls' houses, skirts for their dolls, purses for themselves, and the boys will make school bags and rugs if the material is coarse and strong enough to interest them. But do not try to teach weaving unless you know the best methods—no teaching at all is better than poor teaching. The Daily Vacation Bible School should not teach methods that public schools will later have to correct.

It will add greatly to the interest of this subject if the supervisor has some cotton bolls, a wool roll, silk cocoons, and, if it is possible, some flax in the raw. She may circulate these among the teachers of the various schools for a series of talks or may herself show them as she visits the schools. She will also need some very coarse loosely woven bagging or burlap which she can distribute in pieces to the teachers unless she herself gives the talks.

Let the children examine the materials of their own clothing—cotton in the girls' dresses, wool in the boys' clothes, linen in collars, and silk in hair ribbons. Tell the children that of all the world's workers, about one fourth are busy growing cotton, wool, flax, and silk, preparing these various products for spinning and weaving, and spinning and weaving them into materials such as thread, cord, yarn, rope, ribbon, and wide fabrics. Give them the pieces of bagging. Tell them that the threads parallel with the selvage are called warp. Have them hold them with the warp vertical and let them ravel the woof. In most fabrics the warp is heavier than the woof. Explain that the thread must be spun before it is woven.

Silk is the most interesting of all because the little silkworm does so much of the work and does it so perfectly. Tell the children that silk does not have to be spun like cotton, wool, or flax because the little worm does all the spinning itself.

Let the children examine a cocoon and tell them that it contains about 1000 yards of double thread in a continuous length without knot or other joining and that it is all ready to be unwound from the cocoon. Let the children see how fine the thread is. Tell them that though it is double, twelve such threads will have to be twisted together to make the finest thread used in weaving. Because the thread is so very fine this is a very difficult process and has to be done by hand. It takes more than a thousand such cocoons to make a single pound. Here are facts for the inspirational thought of the teacher, although the children will not comprehend their full meaning: This country alone, in 1914, used $30,000,000 worth of raw silk and its silk manufacturers approximated $240,000,000. The wonderful little silkworm made all this possible. Who taught the silkworm to spin? What is its purpose in spinning? This outline suggests study and treatment for cotton, flax, and wool.

Show the cotton boll, talk about the cotton plant with its rose colored flowers, and the processes required to prepare it for spinning. Show the flax or a picture of the flax plant, and tell the children about its pretty blue flower and explain how the fibers are obtained from the stems. Show the wool and talk about the countries from which it comes and the different kinds of sheep. Libraries abound in books on these subjects.

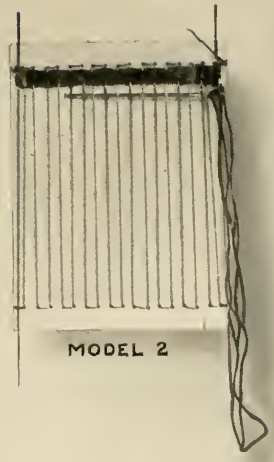
It will add to the interest of these talks if the teacher shows attractive and useful samples of the various textiles—cotton, wool, linen, and silk,—distributes them among the children, and lets them examine them. Some may have cotton warp and silk woof or may be otherwise mixed. Lead the children to make such discoveries. Talk about which is strongest and will wear best, which is warmest, which is coolest, and which the prettiest. Call the children's attention to the different weaves and lead them to give reasons for their answers.

Many materials may be used in weaving—paper, rags, silk, wool, jute, rovings, raveled carpet yarn, cord, and thread.

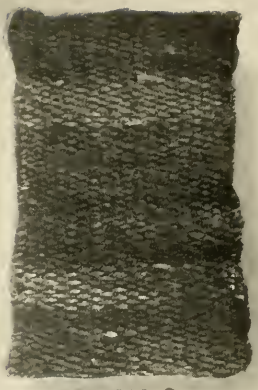
The simplest loom is made of cardboard. There are two kinds. Both are described:

(Model 1.) Cut a square or rectangular piece of cardboard that is 1 in. larger than the piece to be made and ½ in. wider. Cut ½ in. notches in the ends from ⅛ to ¼ in. apart according to the thickness of the warp. Have the notches directly opposite at the two ends. Fasten the warp thread at one corner, then bring it around each notch and lengthwise across the loom to the opposite notch, around it, and back consecutively, until the warp extends from edge to edge of the loom in vertical lines. If holes are punched ½ in. below the top in place of the notches, the work cannot be removed without breaking the loom.

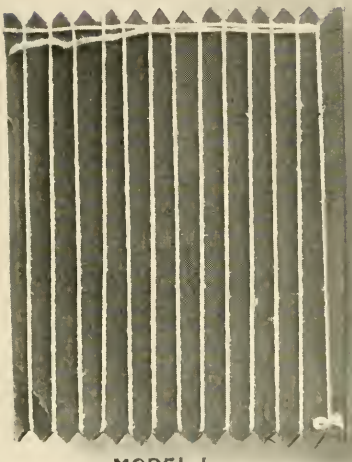
(Model 2.) Cut square or oblong cardboard as before. Punch holes ½ in. from the top and bottom, directly opposite each other and from ⅛ to



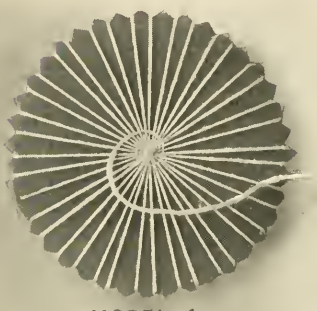
MODEL 2



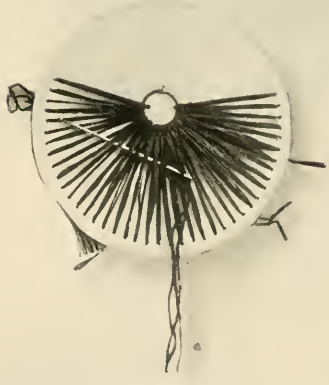
MODEL 3



MODEL 1



MODEL 4



MODEL 5

MODEL 6

¼ in. apart according to the thickness of the warp. Stretch a cord across the holes at the back on both sides and fasten tight at the sides. To thread this loom with warp, begin at the upper right-hand corner, fasten the end of warp, thread it through a hole from back to front, down across the loom to the opposite hole, through it, over the cord, back through the same hole and then to the first hole at the left. Go through this to the back, over the cord, back through the same hole, and across the loom to the opposite hole. Repeat until the loom is covered with warp. Then run a coarse knitting needle through the loops made by the stay cord at each side—this will prevent the woof from pulling in the warp at the sides. The doll's rug is woven on such a loom. (Model 3.)

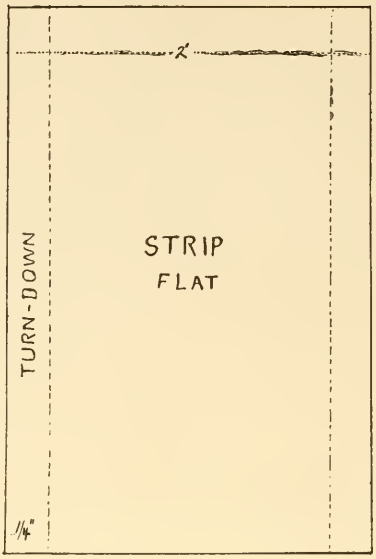
(Model 4.) A round mat may be woven on a circular loom. The warp thread should, if possible, be long enough to thread the loom without knotting. When this is necessary tie at bottom or top, never in the middle. In piecing the woof, run the old and the new threads together for a few stitches, leaving the ends to appear on the outside, as the under is the right side when finished. School supply houses furnish materials such as cords for warp and loosely twisted or coarse untwisted jute or cotton or wool for woof. Or ordinary cottons or wools may be used.

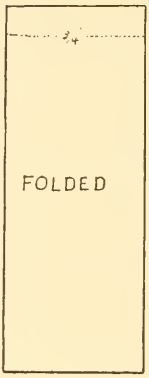
A bag or purse may be woven like the rug by making the loom twice as long as the bag or purse is to be and sewing the sides together when it is completed. Or, a second way: make the loom like the oblong one described. Thread the warp so that it passes over one edge and over the other side at every turn, leaving one edge uncovered for the opening at the top. In this loom the weaving goes around and around instead of across and across. The knitting needle stays at the sides are not used for this.

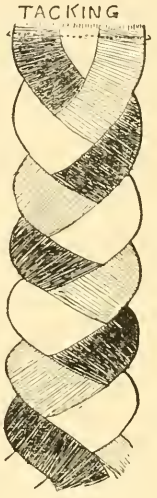
In weaving, go over and under thread after thread in turn and, if the needles are at the sides, go over and under them. This is the simplest of all weaving.

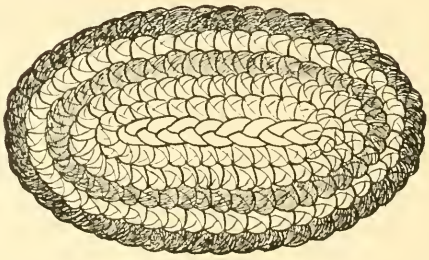
Little Girl's Handkerchief Bag or Purse: (Models 5 and 6.) Cut a cardboard disk 6 in. in diameter. Sew a ¾ in. brass ring to each side directly opposite each other so that the lower edges of the rings will be ¼ in. above the center. Draw a line across the loom just above the top of one of these rings and punch a row of holes ¼ in. apart from one end of this line to the other. To thread the loom, bring the warp over the edge of the ring, down through a hole, up over the ring on the other side, down through a hole, up over the ring on the opposite side and continue until both sides are covered with warp. If the warp has to be pieced because, like raffia, it is in short strands, tie it at the bottom edge and when the weaving is completed untie the knots, thread the ends up through the weaving and cut them off there. Weave over and under strand after strand as in the other looms, covering both sides. Then cut the loom through the holes, take off the bag, and run a few rows of weaving along the edge to make the rows there close and thick. Buttonhole the upper part of the rings. Loop strands of the cord or raffia through the corners and over the rings. Braid them for cords.

MODEL 1









FINISHED RUG

CHAPTER X

FROM RAGS TO RUGS

In introducing this new craft of rug-making into our Daily Vacation Bible Schools we are actuated by the same motive as we were in developing our other industries, namely, character building in the child.

Our object is so to cleanse these little temples committed to our care from the vices of laziness, selfishness, impatience, and deceit, that they may be fit dwellings for the Holy Spirit to live in.

One can only repeat the message of our directors and craft teachers: "Our only aim is quality, not quantity, spiritually and materially."

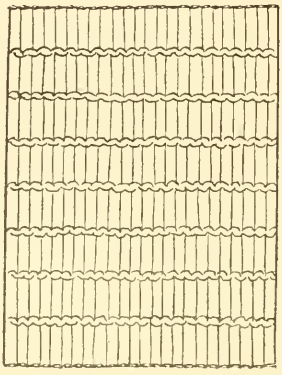
We hope that as the rug, cover, or mat grows into beauty under the little fingers, the inward growth of the soul in patience, industry, and self-control may keep pace with the outward progress of the hand.

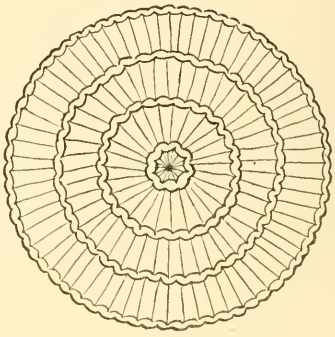
For two reasons we must insist upon perfect work even in this rather difficult craft—First: This rug making is not merely an amusement or play, it has risen to the dignity of an art and craft, and the children are offered the immense advantage of getting quickly, without cost, what requires much time and expense in our trade schools. While we work with the most primitive tools which will produce results at all, those results are often wonderful, and compare most favorably with those of our city schools, when good thorough work is insisted upon.

To allow anything but perfect work is to encourage the vices of deceit and laziness, instead of developing patience, industry, and that proper pride in turning out fine conscientious work which is at once elevating and ennobling, and thereby to defeat the central principle with which our Association has entrusted us, viz., the building of Christian character.

Second: The practical value to the child of this craft is twofold: It teaches him to conserve all his resources, to save the scraps and ends of material which would otherwise only enlarge the waste heap, the only requisite being their cleanliness, and to turn these, with a little effort, into things of beauty and value that the bare floor may be covered, the unsightly table-top hidden by a pretty cover, and at merely the expense of some energy and the family's cast-off garments.

MODEL 1





FINISHED RUGS

Further this craft enables the boy and the girl to produce, after some practice, articles which are salable, being now at the height of their popularity, and so add materially to many a limited income, being thereby often the first step toward better things for the whole family group. The boy who can weave his own rug on his own loom, built by himself, and the girl who helps construct any or all of our six varieties of rugs, are objects of pride and joy to themselves and their families, and of admiration to the community.

Braided Rug.

(Model 1.) Materials: percale, gingham, linen, muslin, cambric, new or half-worn, strips of cotton stockings, and all cotton goods not too heavy or sheer in weight.

Cut in two-inch strips, seam together and turn down one fourth inch on each edge, crease through the center, tack three strips together evenly at the ends, and braid closely and evenly, seaming on new strips as needed. For an oval rug—measure fifteen inches of braid, turn and double the length, lay on flat surface with edges together, and sew with overcasting stitch; turn round at each end and sew in rows, holding braid loosely and keeping work perfectly flat.

To make in distinct rows join each new color braid to some point on previous row leaving the end free, sew all around, and join the ends with tailor's butting stitch—light colors in center and body of rug, darker and heaviest colors toward and at the edge.

Crocheted Rug.

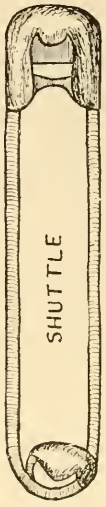
(Model 2.) Materials: Any soft heavy goods, such as outing or cotton flannel, strips of cotton stockings, or most desirable Shaker flannel, five yards of which make a rug about one yard in diameter; also a ball of twine.

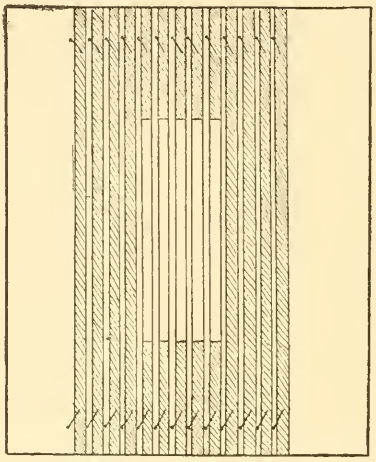
Cut in one-inch strips, join ends with overcasting stitch, wind into balls, sew one end of twine firmly to end of strip, let twine run through the hand and strip run over forefinger of the left hand, and crochet over the twine with a single crochet stitch, always inserting hook in the back loop of the stitch, thus making distinct rows. First crochet about six inches, turn and work round and round, taking up back loop, putting two stitches in every third loop. To join on different colors in rows finish first color with tight slip stitch, sew on new strip, pull up in long loop and proceed with single crochet stitch as before. Work loosely and always take up the rope with every stitch. When rug is large enough, cut off strip and turn under the end on the wrong side and sew tightly down over the end of cut twine.

Flat Weaving.

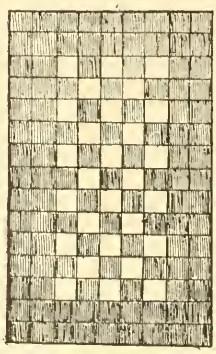
(Model 3.) Materials: Shaker flannel, soft heavy wool goods, doubled strips of cotton goods like those of the braided rugs.

MODEL 3

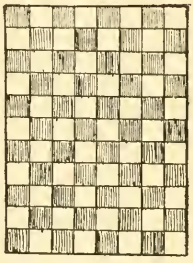




WARP TACKED ON BOARD



FINISHED RUG



PLAIN TWO-COLOR WEAVING

Cut one-inch strips, but do not sew together in lengths more than one yard long.

A pastry board will do well for this kind of weaving. The board must be the full width of the finished rug, plus one inch on each side. Measure one inch down from top of board, draw a line across, start one inch from side and mark off every half inch; repeat marking at the bottom of board. Tack on a strip at the first dot at the top, leaving two inches to extend above tack. Draw down tightly and tack at first dot at bottom of board. Tack on four long strips for two-inch border, eight strips for four-inch border; repeat at the opposite side. On dots between these side borders, tack on six-inch strips for two-inch border, eleven-inch strips for four-inch border, leave the ends free and sew on to them the strips of contrasting color and tack at bottom as before.

Fasten pin in end of a strip for the woof thread and weave across as in darning, tacking end of first strip to side of board. Sew on new strips as needed, and continue to lower line. Take out tacks, move rug up, retack, and weave on until rug is long enough. Then piece on short strips of the first color for end border as at the top, and finish weaving. When completed, remove tacks, turn ends of top and bottom border under on wrong side, and sew firmly. Line rug with firm material and finish with fringe.

Colonial Rug.

(Model 4.) Materials: Half-worn or new cotton goods like those for braided rugs except very heavy or very sheer varieties.

Cut strips about one inch wide, lap over at ends, and sew firmly; wind loosely into balls. Place tacks (three-quarter inch brads) in top and bottom of frame one quarter inch apart; fasten warp (coarsest Dexter cotton) with tack on upper left-hand corner of frame; turn over first brad, draw down and under first brad below, then up and around each pair of brads across width of board. There must be an uneven number of warp threads. Run line of heavy wire along with end warp thread on each side, fastening with wire nails at top and bottom of frame. Fill the shuttle with woof, fasten end of woof to lower left-hand corner of frame, and weave across until shuttle is empty. Fasten on end of new woof to old strip and continue until completed.

Do not fasten on new woof at edge of rug, but about one inch inside of edge.

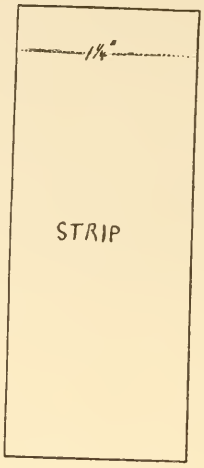
Borders of contrasting color, at the ends wide and in the body narrow, are in good taste. Borders should always be outlined in black, strips of black cotton stocking being excellent for the purpose.

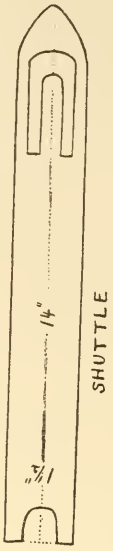
Use ordinary coarse comb for a batten to push down woof threads close together, and batten down each line firmly.

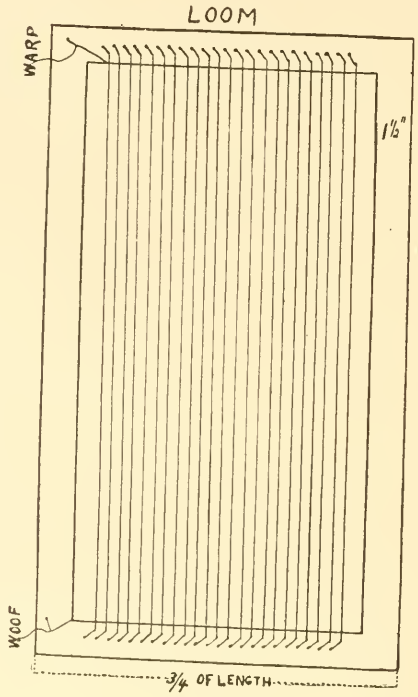
Do not draw in woof lines closely at the sides but let them stand away from wire about one quarter inch; push wire out on each side every time a woof line is woven across.

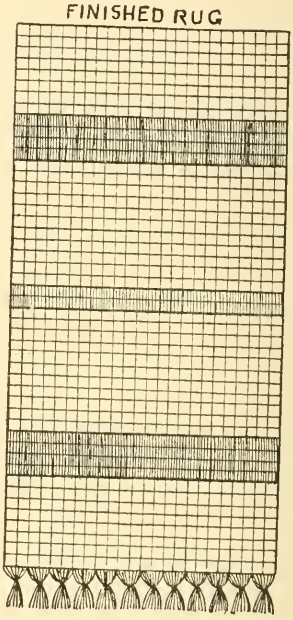
Finish with fringe of heavy cotton.

MODEL 4


1¼"
STRIP


SHUTTLE
14"
¾"


LOOM
WARP
1½"
WOOF
¾ OF LENGTH


FINISHED RUG

The Indian Blanket.

(Model 5.) Materials: Fourfold worsted or four strands of carpet yarn. Place brads in top and bottom of the frame one quarter inch apart; fasten warp (medium weight cotton) with tack on upper left hand corner of frame; turn over first brad, draw down tightly, turn under first brad below, then up and around each pair of brads across width of frame. There must be an uneven number of warp threads.

Run line of heavy wire along with end warp thread on each side, fastening with wire nails at top and bottom of frame.

Fill shuttle with yarn, fasten end to lower left-hand corner and weave across until shuttle is empty.

Fill shuttle as needed but do not join ends of woof threads, let them extend out on surface of rug about two inches and start new thread two inches back of end of old thread, under the same warp lines.

Do not begin new woof at the edge of rug.

The color scheme suggested on the diagram can be reversed or any other substituted, but all borders and patterns must be outlined with black.

Use ordinary coarse comb for a batten to push down woof threads close together, and batten down each line very firmly. Do not draw in woof lines closely at the sides but let them stand away from the wire about one quarter inch; push wire out on each side every time a woof line is woven across.

Hooked Rug.

(Model 6.) Materials: Woolen flannel, or heavy loosely woven cloth can be used if flannel is not available.

Stretch burlap or sacking on a stout wood frame with the warp lines of the burlap running exactly parallel with the sides of the frame, and tack the doubled under edges firmly on the under side of frame.

Apply design to the upper side of the frame with small brush and diluted laundry bluing.

Use ruler to outline borders and stencil to put in figures.

Cut strips about three eighths wide and not more than eighteen inches long.

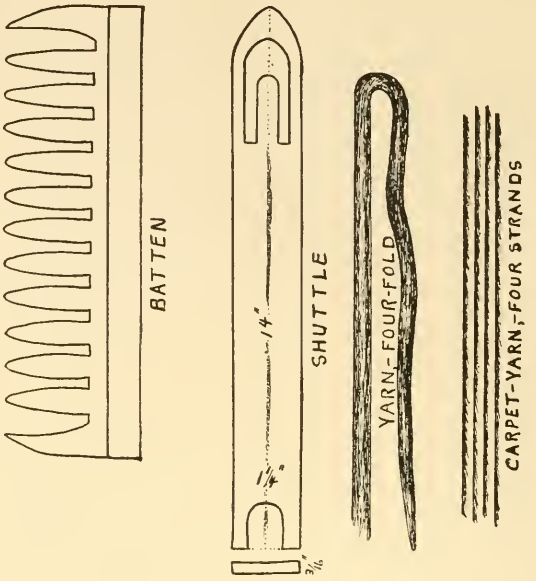
Place frame across backs of two chairs, take strip in left hand and hold loop of it close up against the under side of the burlap; take hook in the right hand, push down through hole in burlap and draw up loop one half inch above the surface. Work in straight lines as much as possible and set the loops about two holes apart.

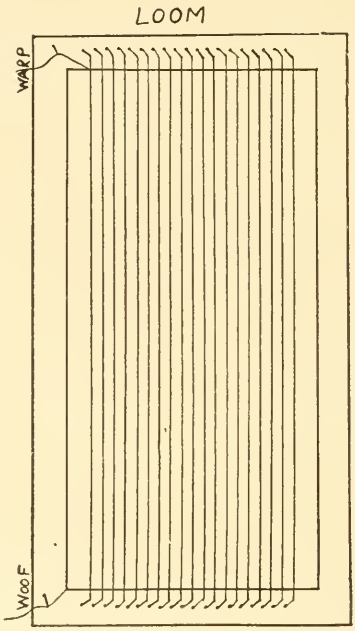
First outline all borders and figures and lines with black and set these outline loops end to end; set other loops side by side wherever possible.

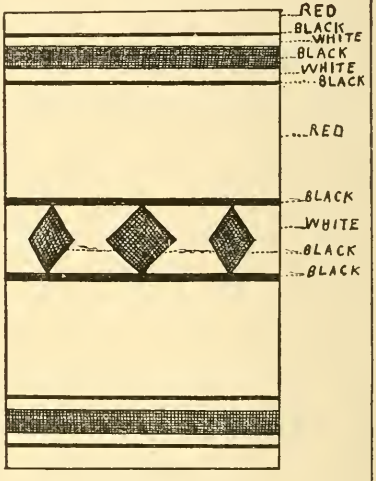
When whole surface is covered closely, push up from wrong side with left hand and shear off tops of loops with sharp shears. Take small stiff brush and brush surface of rug firmly from end to end, all strokes to be made in the same direction, until surface is soft and wooly.

Take off frame, turn loose edges of burlap down on wrong side of rug, baste down, and line the rug with stout material like denim or galatea.

MODEL 5

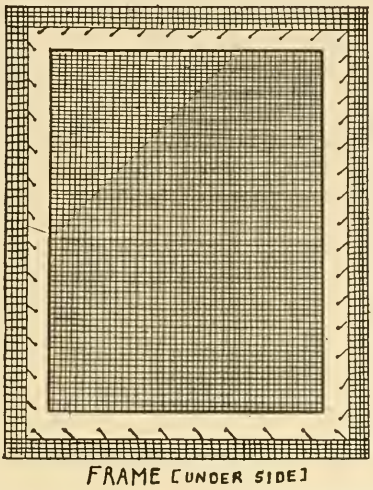




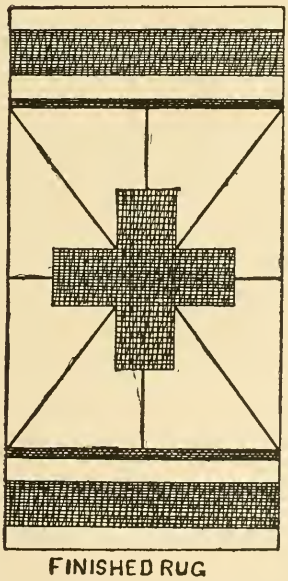


FINISHED BLANKET

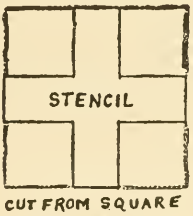
MODEL 6



FRAME (UNDER SIDE) WITH BURLAP STRETCHED AND TACKED

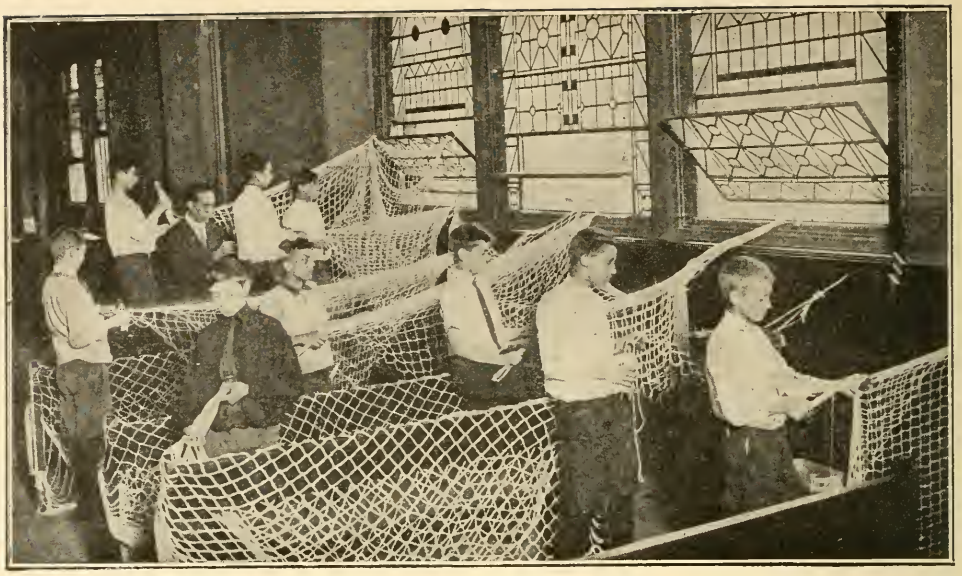


FINISHED RUG



CUT FROM SQUARE OF HEAVY CARD-BOARD

CROSS — 1/3 RUG LENGTH
1ST BORDER — 1/8 " "
2ND BORDER — 1/2 " "



Daily Vacation Bible School Boys Making Hammocks

CHAPTER XI

CORD

Watch the cord carefully. Keep it in a safe place when not in use and have out but a small amount during industrial hour.

It is a simple matter for a boy to conceal a quantity of cord in his blouse, but the effect upon him morally is so serious, that temptation must not be placed in his way. Vigilance is especially needed during the first week of school.

Make no promises that the boys shall own the hammocks made by them, unless the material is paid for. Each full-sized hammock requires about two pounds of cord.

Cord comes in different sizes, colors, and materials which determine its use.

Laces for one dollar a gross or towel tape on large spools of 1000 yards for $1.35, are sold at department stores.

KNOTS

Knots have served as a primitive language between tribes, color and kinds having their own symbolic signification. They have a decorative purpose in garments for man, trappings for horses, and house furnishings. In almost every walk of life a knot is of some use—for joining loose ends, to

KNOTS

Fig. 2

Fig. 3a

Fig. 3b.

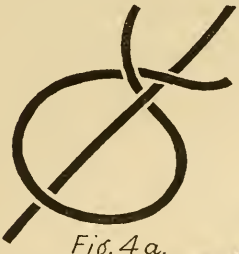


Fig. 4a.

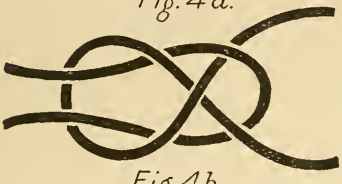


Fig. 4b.

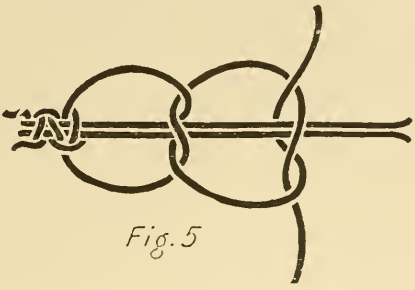


Fig. 5

HAMMOCK NETTING

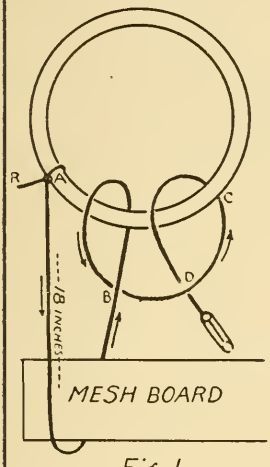


Fig. 1

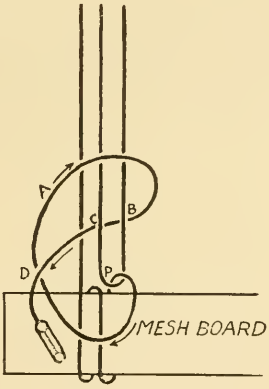


Fig. 2

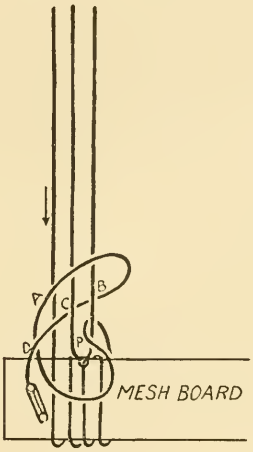


Fig. 3

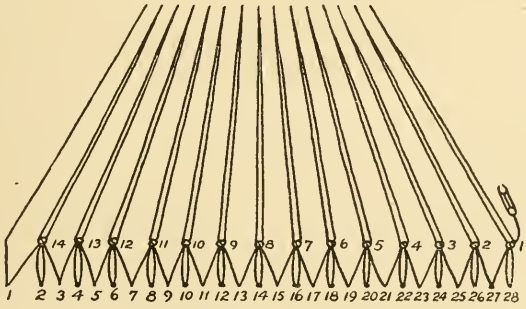
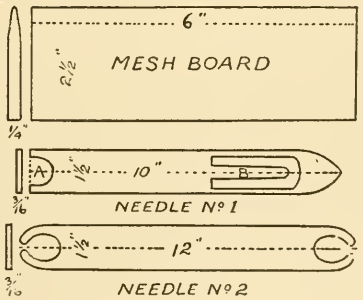


Fig 4



insure strength, for decoration, for covering surfaces, and for shortening lengths.

The first end which is usually fastened to something stationary, sailors call the "standing part"; the distance between this and the "end," the "bight."

Single Knot. The sailor's description: "Pass the end over the standing part and through the bight." This single knot, called by some the "running knot," is the simplest of all knots. One or more strings may be used. The knots must all be pulled with equal tension in order to have them the same size, and great care must be used to have them equidistant. This single knot may be used for chains, fans, whistles, and keys, and for doll hammocks and bags.

* **Figure-of-Eight Knot** or **Flemish Knot.** (Fig. 2): Pass the end of the rope to the left, back over and around the standing part and down through the first bight.

* **Square or Sailor's Knot.** (Figs. 3a and 3b): Make a single knot, throwing right-hand thread over left-hand thread and through the loop; pass same thread (now left-hand thread) over right-hand thread and up through second loop. Draw tight.

* **Weaver's or Thumb Knot.** (Figs. 4a and 4b): Weavers call this the thumb knot because it is made over the thumb of the left hand and is used in joining ends as they break. Hammock makers use this knot to join their cord. Lay new left-hand strand over end of strand connected with work. Hold tight with thumb and finger of left hand. Pass standing part over thumb, back under original end and forward over new end. Pass new end over thumb through loop thus formed. Hold original end and standing part with right hand and other two ends in left hand. Pull evenly.

* **Solomon's Knot.** (Fig. 5): Tie four strands at one end and fasten firmly to table with thumb tack. Pass strand on extreme left over two center strands, under strand on extreme right; pass out this strand on extreme right under two center strands and up through loop at left. Pull up flat and tight, keeping center strands straight. This is one half the knot. There is a bar on right side. There is always a bar on one side. Begin with strand under this bar. Pass right-hand strand over the two center strands, under strand on left. Pass strand on left under center strands and up through loop at right. This completes the knot. Continue alternately from right to left until braid is of required length or needed number of knots has been made.

HAMMOCK NETTING

Materials: 1½ lb. soft seine cord No. 32; 1 mesh board; 1 hammock needle; 2 two-inch japanned rings.

Wind needle No. 1 by bringing cord around the end at *A*, up one side around the pin *B* and back the same side. Repeat this process on other side of needle.

Screw a hook securely to some firm place. If impractical to screw this

hook into the woodwork an S hook may be hooked into string which has been wound several times around a pillar or some firm support. Upon this hook hang one hammock ring which may be easily removed when the hammock is to be turned.

In order to prevent tangles wind the skein of cord into a ball. Tie end of cord to ring, Fig. 1, *A*, with figure-of-eight knot which will not slip leaving a 2-inch end of cord, Fig. 1, *R*. This end may be laid along ring under cord, hiding it as work proceeds. Hold mesh board firmly, bottom of mesh board 18 in. below ring. Bring cord down and over mesh board, back and up through ring and down through loop thus formed. Fig. 1, *B*. Draw up tight to ring, holding at crossing with thumb and first finger of left hand. Pass needle up through ring again, Fig. 1, *C*, and down through loop thus formed Fig. 1, *D*, holding thumb in position as long as possible to prevent knot from slipping. Draw up tight. This forms one loop. Repeat until 14 loops 18 inches long are on mesh board. **Hold mesh board straight so that the loops will be of equal length to keep hammock straight.**

Remove from mesh board and turn ring over, letting loops hang. The cord now leads from ring. **Always work from left to right.** Pass cord down around mesh board twice to form double length loops, then up through loop Fig. 2, *P*. Draw to top of mesh board and hold tightly with thumb and first finger of left hand. Toss cord over to left, forming small loop Fig. 2, *A*. Pass back under long loop Fig. 2, *B*, *C*, coming over small loop *A*, Fig. 2, *D*. Draw tight, holding left thumb in position until knot is tied. Repeat through same long loop, Fig. 3, thus tying two knots on bottom of each long loop. Repeat this process on each loop, being sure to use the loop next in order. Fourteen long loops with two knots on bottom of each will give twenty-eight knots. This forms the width of hammock. Remove from mesh board, Fig. 4, turn ring over. On the bottom of each of these 28 loops put one single-length loop. Tie knot as directed **but pass cord around mesh board only once** to form single-length loop.

Continue this netting until you have 28 rows of knots. The diamond formed between two rows of single loops is called a mesh. To finish hammock so that both ends shall be alike, make a double-length loop by passing twice around mesh board on this last row. Lay aside mesh board. Stretch hammock tight full length. Eighteen inches from end of last loop fasten second ring or have it held. Cord now leads from last loop. Pass needle up through ring as in first process, Fig. 1. Turn back to hammock, taking two loops each time, crossing left loop over the one on its right and tying knot as usual. Two loops are taken each time in order to reduce to 14 long loops as in the beginning. When these 14 loops are made, fasten end of cord securely to ring with figure-eight-knot and with carpet needle draw end along ring under cords to finish. Cut the end close.

NOTE: To join a fresh needleful of cord use the sailor's or weaver's knot. Conceal ends by twisting them into cord either side of this knot.

Made by a Daily Vacation Bible School Boy

CHAPTER XII

A COURSE IN WOOD SLOYD AS TAUGHT IN PHILADELPHIA DAILY VACATION BIBLE SCHOOLS

EQUIPMENT needed in the Course:

Sloyd knife
Pencil compass
Rule
Pencil and eraser
Bass wood $\frac{3}{16}$ in. or $\frac{1}{4}$ in. in thickness.

TEN MODELS are arranged for the course, carefully graded in difficulty so as not to overtax the child's ability. Each model is planned to illustrate some new principle of laying out, cutting, or putting together.

FIGURE 1. Illustrates a simple model. The child is here taught how to cut with the grain and across the grain.

FIGURE 2. Teaches cutting to the curved line.

FIGURE 3. Illustrates more complex curved lines.

FIGURE 4. Teaches the child to cut to concave and convex lines.

FIGURE 5. Illustrates cutting with the grain, against the grain, across the grain, and obliquely.

FIGURE 6. Also requires cutting in all directions.

FIGURE 7. Requires cutting out the center.

FIGURE 8. Teaches the child the idea of thickness.

FIGURE 9. Is a three-piece model. Half-inch brads and glue are used to fasten the parts together.

FIGURE 10. Is a five-piece model. It is more difficult than the last.

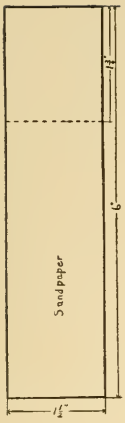


Fig 1

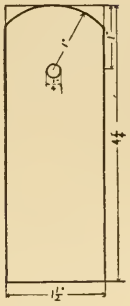


Fig 2

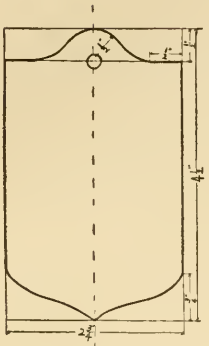


Fig 3

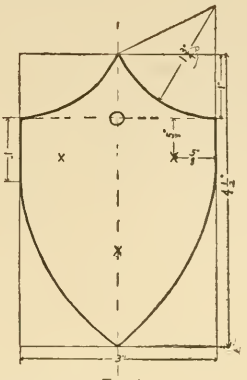


Fig 4

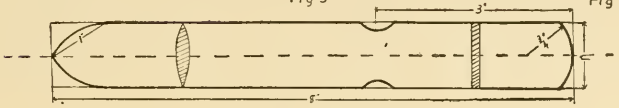


Fig 8

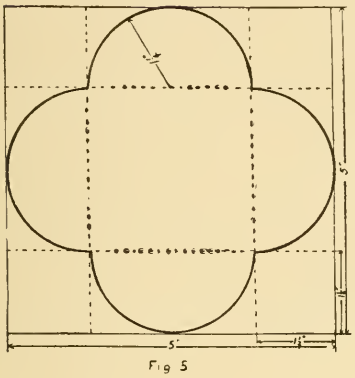


Fig 5

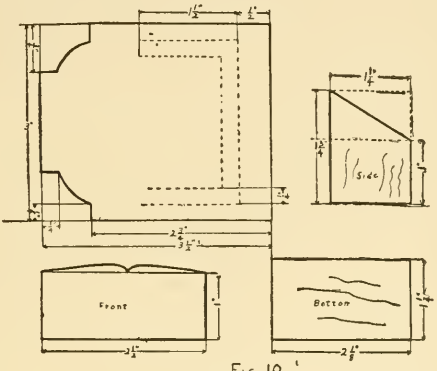


Fig 10

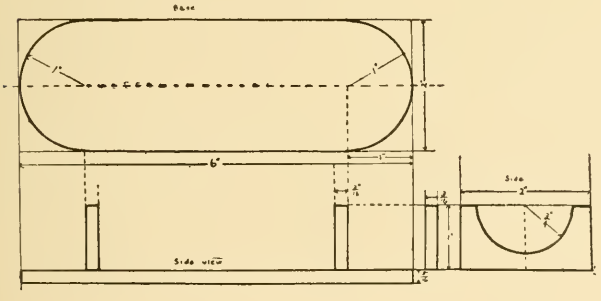


Fig 9

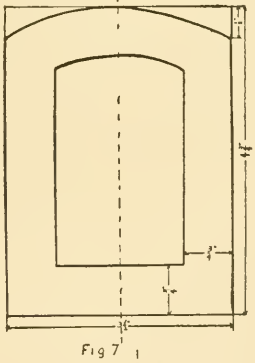


Fig 7

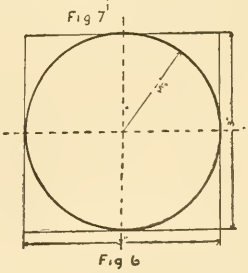


Fig 6

FIG. 1. Pencil Sharpener 6″ x 1½″
FIG. 2. Key Tag 1½″ x 4¼″
FIG. 3. Match Striker 2¾″ x 4½″
FIG. 4. Key Board 4½″ x 3″
FIG. 5. Mat 5″ x 5″
FIG. 6. Standard for Paper File 3″ x 3″
FIG. 7. Picture Frame 3½″ x 4¾″
FIG. 8. Paper Knife 8″ x 1″
FIG. 9. Pen Rack 6″ x 2″
FIG. 10. Match Holder 3½″ x 3″

General Directions.

The model and the drawing should first be shown by the teacher. The blackboard may be used to advantage. A working drawing should be required of the child before the work is attempted.

These points should be observed:

(1) Place your name on the board.
(2) Mark the best side of the board. This is called the face or working side.
(3) Make one of the long sides true.
(4) Test it by holding the broad side ot a ruler or T-square along it and see that all parts evenly touch the ruler.
(5) True the side that extends across the grain.
(6) True the remaining sides in similar manner.
(7) Do not cut against the grain. Cut always with it.
(8) Hold the knife in the right hand and the wood in the left.
(9) Cut away from the body, using long strokes.
(10) Keep the left hand back of the blade of the knife.
(11) Hold the knife flat on the wood. Do not cramp the hand.
(12) Draw the knife evenly along the wood.
(13) Begin cutting at the end held away from you and take off a succession of chips of equal depth all the way across.
(14) Cut from the short to the long fibers of the wood when cutting a curve.
(15) Sharpen knife as soon as it becomes dull.
(16) Use sandpaper for cleaning the models; never for smoothing the surfaces. Use it with the grain; never across it. Use it along the sides, and up and down at the ends and curved edges.
(17) In order to keep the sandpaper firm while using, place it over a small block of wood.
(18) In staining the flat surfaces, draw the brush along the grain. Color evenly, and avoid overlapping.
(19) To stain the edges, use the point of the brush.
(20) As slight wounds are likely to occur, keep some adhesive plaster and sterilized gauze in a glass jar.

The Value of Sloyd Work.

To develop character in boys and girls by teaching them self-reliance and generosity; by encouraging them to do their own thinking; by developing self-respect rather than vanity; by teaching them the habits of order and neatness, and by working for others, thus getting training in good citizenship.

SUGGESTIONS FOR OTHER MODELS

Bow Kite, Box Kite, Bird House, Corner Bracket, Cake Paddle, Calendar Back, Crochet Needle, Doll Furniture, Flower Stick, Fish Line Reel, Glove Mender, Glove Box, Handkerchief Box, Key Rack, Letter Box, Pin Tray, Paper Knives, Paper Weight, Pen Holder, Picture Frame, Tie Rack, Wall Bracket, Yarn Winder.